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ELECTRIC MOTOR USAGE, REPAIR, AND REPLACEMENT PRACTICES AT KANSAS ARMY AMMUNITION PLANT

WILLIAM A. COOK
DAY & ZIMMERMANN, INC.
KANSAS ARMY AMMUNITION PLANT
PARSONS, KS 67357

EDWARD A. KRAJKOWSKI
PROJECT ENGINEER
ARRADCOM

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US ARMY ARMAMENT RESEARCH AND DEVELOPMENT COMMAND
LARGE CALIBER
WEAPON SYSTEMS LABORATORY
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) A large part of the cost of electricity at the Kansas Army Ammunition Plant (KAAP) is attributable to the operation of electric motors used in the process operations. Electric motor usage, repair, and replacement practices were surveyed to determine if current procedures are cost effective and energy efficient over the life-cycle of the equipment. An inventory of all motors rated greater than one-quarter horsepower was performed. A		

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total of 1,985 motors were inventoried, of which 854 were active and 1,131 were inactive. It was determined that current practices are cost effective. Reduction of energy consumption by replacement of motors with premium priced, higher efficiency motors was examined. Only thirty-one motors qualified for economic replacement when the present motor fails. No motors qualified for immediate replacement since the expected reduction in operating costs could not amortize the cost of a new motor in any reasonable length of time. Standardization of motors and efficiency improvement through application of capacitors and power factor controllers were considered and determined not to be cost effective. Care in specifying replacement motors over the years has resulted in very few motors which are oversized for their application. Corrective action will be taken in these few instances.

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CONTENTS

	Page
Introduction	1
Study Procedure	1
KAAP Production History and Current Status	2
Motor History	5
Motor Procurement Practice	6
KAAP Electrical System	6
Electric Motor Efficiency Improvement Alternatives	7
KAAP Motor Information	10
Economic Evaluation of Motor Changes	13
Motor Deficiencies	15
Standardization of Motors	16
Conclusions	17
Appendixes	
A Active motors sorted by location and by horsepower rating at each location - Building numbers below 999	29
B Active motors sorted by location and by horsepower rating at each location - Building numbers above 1000	45
C Inactive motors sorted by location and by horsepower rating at each location - Building numbers below 999	51
D Inactive motors sorted by location and by horsepower rating at each location - Building numbers above 1000	61
E Active motors sorted by increasing annual electricity cost - Building numbers below 999	79
F Active motors sorted by increasing annual electricity cost - Building numbers above 1000	95
Distribution List	101

TABLES

Summary of annual electricity costs	18
Summary of annual hours of operation	19
Summary of active, inactive, and total motors sorted by horsepower rating	20
Summary of active, inactive, and total motors sorted by location	22
Summary of current annual electricity costs required for economic payback of motor changes	23
Summary of motors qualifying for economic replacement	25
Motor replacement plan	26

INTRODUCTION

The purpose of this study was to develop a plan for reducing electrical energy consumption at Kansas Army Ammunition Plant (KAAP) through the use of properly-sized and energy efficient electric motors. An inventory was to be performed of all KAAP electric motors rated greater than one-quarter horsepower and pertinent motor data and applications were to be recorded. The information compiled was to be used to determine where deficiencies exist and to develop a means for orderly elimination of those deficiencies. A comparison was to be made involving the applicability of high efficiency electric motors versus standard models at KAAP. A determination was to be made relative to the value of standardizing motors for specific applications.

There are presently 1,985 electric motors at KAAP that have a rating greater than one-quarter horsepower. Of these, 854 are active and 1,131 are inactive. Due to the diversity of the load, assemble, and pack operations and various support equipment, these motors range in size up to 400 horsepower with annual electricity costs ranging up to \$24,000.

STUDY PROCEDURE

The initial phase of this study involved reviewing the production history of KAAP, researching for sources of KAAP electric motor information, reviewing the normal practice for procurement of motors, assessing the types of motor applications that would be involved, assigning maintenance and engineering personnel to the study, and purchasing equipment.

The second phase primarily consisted of performing the motor inventory and recording pertinent motor data. Manufacturer literature was collected during this phase also.

The third phase of this study concentrated on analyzing the motor data obtained in the second phase and the manufacturer information received. Raw motor data was organized, edited, and entered onto computer files to facilitate further analysis and preparation of the final

report. During this phase, data omissions were noted and additional field work performed.

The final phase involved preparation of tables and other support data for the final report.

KAAP PRODUCTION HISTORY AND CURRENT STATUS

The Secretary of War authorized the feasibility study and the preparation of the development package for KAAP, originally identified as the Kansas Ordnance Plant, on 31 May 1940. On 4 August 1941, the Secretary authorized the construction of three load lines, one each for the 105-mm artillery projectile, the 155-mm artillery projectile, and the 100-pound bomb. Also authorized was construction of facilities for: production of fuzes, boosters, detonators, and primers for the foregoing ammunition; manufacture of amatol and ammonium nitrate; administrative, maintenance, and support activities; and the necessary utilities.

Initial production began in July 1942 and continued until August 1945. During this period, artillery ammunition, bombs, and components for artillery projectiles (such as fuzes, boosters, detonators, relays, and primers) were assembled and ammonium nitrate was produced. The plant was placed on a standby basis in September 1945 and continued on this basis until August 1950.

During August 1950 the Ordnance Corps issued instructions for partial reactivation of the plant. By September 1954 all production lines had been reactivated, and the ammonium nitrate area had been converted to a cartridge case rework area. Items produced consisted of bombs, artillery ammunition and component parts, and reworked 105-mm cartridge cases. Subsequent to the signing of the Korean Truce, production schedules gradually diminished. Upon completion of production orders, the applicable area was decontaminated and laid away. The layaway of the last active production line was completed in July 1957. The plant was again placed on a standby basis, and continued on this basis until December 1966.

During December 1966, the Ordnance Corps issued instructions for reactivation of the plant in support of the Southeastern Asia situation. This reactivation operation commenced in early 1967. With the exception of the cartridge case rework area, all production facilities

were activated. The 100-pound demolition bomb line (1100 area) was converted to a cluster bomb unit (CBU) line, the 105-mm artillery projectile line (900 area) was equipped for loading 81-mm mortar cartridges, and the 155-mm artillery projectile line (1000 area) was converted to a 105-mm artillery projectile line. Items produced consisted of cluster bomb units, 105-mm artillery projectiles, 81-mm mortar cartridges, detonators, fuzes, primers, and lead cup assemblies.

Following cessation of the Southeast Asia situation, production schedules gradually diminished again. Upon completion of the production orders, the applicable area was decontaminated and laid away. By 1975 five of the eight production lines had been placed in an inactive state. Another production area (105-mm artillery projectile) remained active until June 1978, when it was placed in an inactive state. A lead azide production facility (3000 area) was completed in September 1968, partially tested, and placed in an inactive state during 1971.

The production and support facilities at KAAP are identified by their location in numbered areas (fig. 1). Buildings having a number between 900 and 999, for example, are located in the 900 area. The 100 area houses the administration offices, safety and security offices, hospital, communications center, and the laundry. The 200 area includes the maintenance shops, warehousing, and offices for the equipment and property control and maintenance supervision staffs. The 300 area operates on a one-shift (1-8-5) production schedule to load, assemble, and pack the projectile M483. A short term shell rework project is operating on a separate shift (1-8-5) at this time but will terminate in September 1982. The 500 area is in layaway status at this time but has been used to load, assemble, and pack the artillery fuzes M716 and M717. The 700 area operates on a one-shift (1-8-5) production schedule to load, assemble, and pack the detonator M55 and expulsion charges. The 800 area is in layaway status at this time but would be reactivated during mobilization to load, assemble, and pack the artillery primer M28B2. The 900 area is in partial layaway status at this time. A rework operation utilizes three buildings on a single shift (1-8-5) basis. During mobilization, this line is scheduled to load, assemble, and pack the 81-mm mortar cartridge. The 1000 area is in layaway status at this time but is scheduled to load, assemble, and pack the 105-mm projectile during mobilization. The 1100 area is in partial layaway status at this time with several buildings being used to support production of the Anti-Armor Cluster Munition.

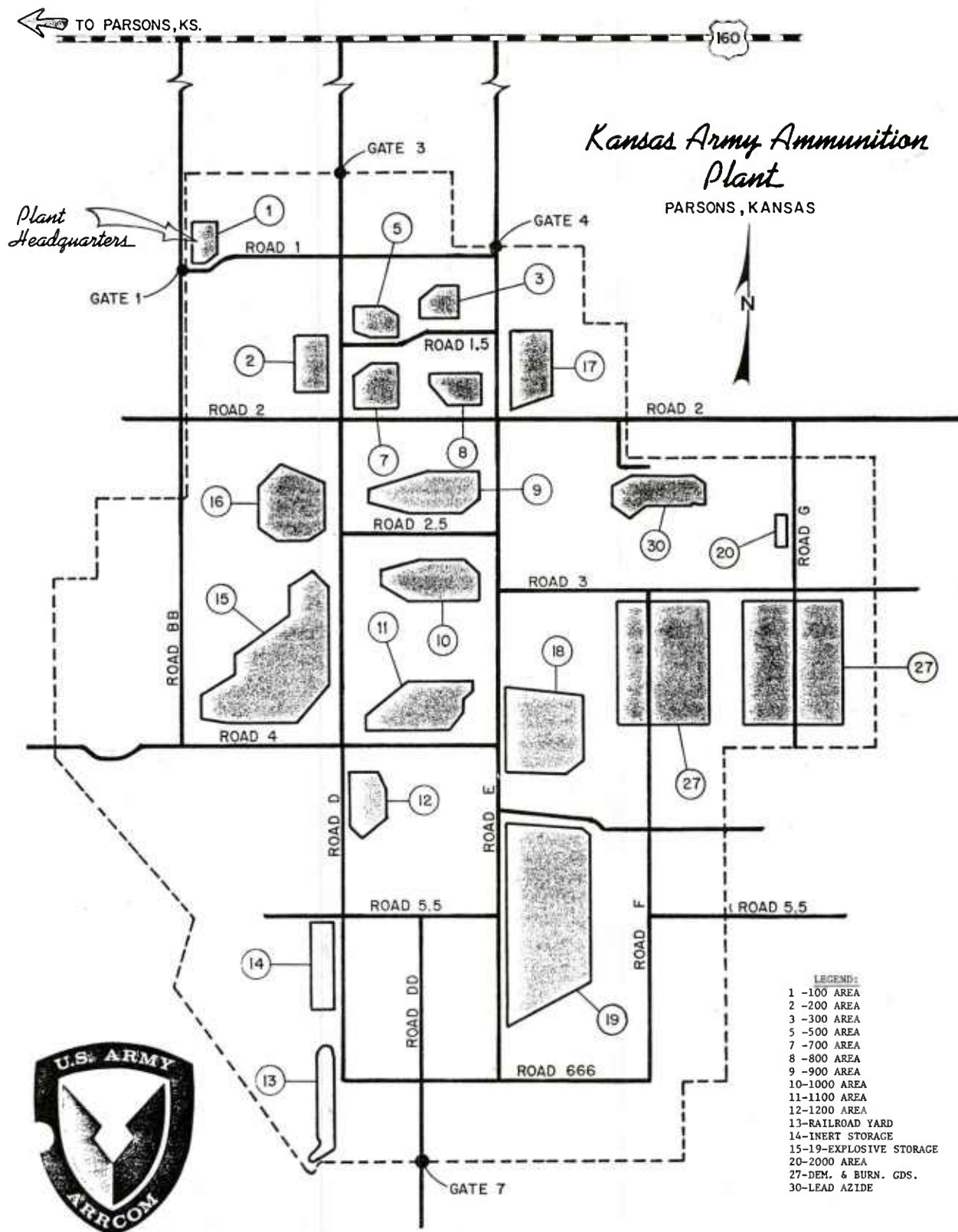


Figure 1. Map of Kansas Army Ammunition Plant (KAAP)

During mobilization, this line is scheduled to load, assemble, and pack the CBU 58B and 71. The 1200 area is in layaway status at this time but has been used to produce ammonium nitrate and for cartridge rework operations. The 1400 area is in partial layaway status at this time. This area provides warehousing for inert components and materials used in the production operations. The 2000 area is used for reliability testing of M42 and M46 grenades in support of the 300 area production. The 2100 area contains the facilities for the production of potable water. The 2200 area contains the facilities for treatment of sanitary sewage wastewater. The 3000 area is in layaway status at this time but is scheduled to produce dextrinated and RD-1333 lead azide during mobilization.

Some facilities are not located within the above described areas. These buildings carry numbers less than 100. Buildings referred to in this report include: Building 52 - Fire Station; Building 53 - Receiving and Inspection; Building 57 - Physical Test; Building 58 - Gage and Chemical Laboratories; Building 60 - Yardmaster's Office; and Building 80 - Dunnage Shop.

MOTOR HISTORY

As KAAP production schedules have varied during the past 40 years, so have the numbers, sizes, types, and applications of electric motors. Following World War II, nearly all motors were laid away. These motors were then reactivated to support production during the Korean Conflict. Some motors were added at that time. Again, nearly all motors were laid away following cessation of the Korean Conflict. During the period of 1957 to 1966 very few motors were active at KAAP. In support of production for the Southeast Asia situation, nearly all motors were reactivated. Modernization and expansion projects resulted in the addition of a large number of motors to the KAAP inventory, especially in the 900, 1000, 1100, and 3000 areas. Conversion in 1976 of the 300 area for production of the 155-mm, M483 projectile added many motors to the KAAP inventory. Current construction, modernization, and expansion projects will impact similarly.

One alternative to motor replacement that has been employed at KAAP is rewinding problem motors. Several

hundred motors have been rewound during the past 15 years alone. Many were rewound prior to that period as well. This contributed to the current situation where installed motors range in age from new to 40 years.

MOTOR PROCUREMENT PRACTICE

The current practice for procuring electric motors at KAAP is as follows. An individual budget responsible manager notes that a motor is required. A purchase requisition is then prepared detailing the exact specifications for the replacement or newly-required motor. During normal processing, the purchase requisition is reviewed by an electrical engineer in the Project and Facilities Engineering Division of Day & Zimmermann, Inc. (D&Z) for suitability for the application. At this point, an alternative motor may be recommended for any one of several reasons. The purchase requisition is then processed by the Purchasing Department of D&Z and motor suppliers are contacted.

The additional screening by the electrical engineer is a requirement started in 1979 to improve motor selection. Factors such as energy efficiency, power factor, service factor rating, and design improvements can be overlooked quite easily by budget responsible managers who infrequently procure electric motors and who, in some cases, have little technical expertise in motor selection. This step also can result in a recommendation that the motor in question be rewound in-house rather than replaced.

KAAP ELECTRICAL SYSTEM

Electricity for KAAP is purchased from the Kansas Gas and Electric Company. The main substation is served by three-phase, 60-cycle, 66-kilovolt primary power. The electricity is transmitted throughout the plant via 7,200/12,470 volt, three-phase, grounded "Y" connections.

The following services are provided at various locations with most major areas being served by several types: 120 volt, single phase; 120/208 volt, three-phase;

120/240 volt, single phase; 240/480 volt, three-phase;
277/480 volt, three-phase; and 480 volt, three-phase.

A limiting factor, in some instances, can be service type available when replacement motors are being selected. Major changes in service types are not normally economically feasible just to permit operation of certain types of motors. This should not be totally discounted, so this will be given consideration for future multiple motor changes.

ELECTRIC MOTOR EFFICIENCY IMPROVEMENT ALTERNATIVES

There is no single, simple solution to reducing electric motor energy consumption and cost. The total cost of electrical service can include usage (kilowatt-hour) charges, demand (kilowatt) charges, and power factor penalty charges. No single method is the best solution for reducing these expenses and energy waste. Improved motor energy consumption may be achieved by use of more efficient motors, use of energy efficiency improvement devices such as power factor controllers, use of higher speed motors in some instances, use of motors with lower horsepower ratings, use of motors designed specifically for the application, and use of more efficient driven equipment.

Four of the six alternatives above require replacing the existing motor with another having superior characteristics. This, then, requires that the electricity savings amortize the cost of purchasing and installing the replacement motor within a reasonable time period. One alternative requires installation of power factor improvement equipment for the existing motor. This, too, requires that the electricity savings amortize the purchase and installation costs within a reasonable time period. The remaining alternative involves replacement or maintenance of the driven equipment such that the motor load is reduced. Satisfactory amortization is a necessity.

To improve motor efficiency by installation of a different motor is normally quite simple. Determining the actual efficiency gain in advance is not. Design efficiencies of electric motors vary with motor type and size and have changed through the years as electricity and motor hardware costs have changed. Very few manufacturers list efficiency data in their sales catalogs. Those including this data do so only for full load situations.

Thus, it is difficult to compare motor efficiencies without actual operation data. To improve motor efficiency manufacturers may use more iron and copper in the motor, use thinner but more expensive insulation, require closer tolerances, and/or improve workmanship. High efficiency motors are designed to minimize internal losses for applications requiring the rated design load, or close to it, for most of the duty cycle. When motor load is reduced, the electromagnetic effects within the motor don't reduce correspondingly and the internal losses are proportionally higher. Therefore, low load efficiency is still poor.

Discussion of replacing motors at KAAP having low efficiencies with more efficient motors is included starting on page 14. The principal deterrent to this alternative is expected annual electricity savings. Another problem is determining the actual efficiency improvement to be expected. This is compounded by the wide range of sizes, motor types, ages, applications, and hours of operation. Another complication involves explosion-proof motors which are the dominant type at KAAP. No manufacturers could be found that offered both standard and high efficiency explosion-proof motors which would permit direct comparison of the rated efficiencies and the corresponding purchase cost increase. One manufacturer maintains that its motor line is designed to be more efficient than the standard motor lines available from other sources; but since the other manufacturers tend to not provide efficiency data, direct comparison was not possible.

To improve motor efficiency by installation of electrical devices such as capacitors is quite simple in theory but determining the actual energy and cost savings is not. Power factor improvement is the goal of this alternative. Power factor is the ratio of electrical power used by a motor to perform useful work to the total power drawn from the utility line. Capacitors, for example, supply reactive power to inductive equipment (motors) to reduce the need to draw this power directly from the utility line. This raises the power factor, reduces the current, and the kilovolt-ampere demand decreases somewhat. Capacitors help to reduce electrical load through reduction of the motor heat load by lowering the current. Also, as current decreases, distribution system losses become smaller and plant distribution voltage drops decrease.

Power factor controllers are designed to improve power factor by sensing the load on the motor and modifying the applied voltage so that the motor draws nearly full load

current at full load power factor, but at a reduced voltage. Core losses and copper losses are reduced while full load motor speed remains nearly constant. The availability of power factor controllers for use with three phase motors has been a limiting factor in application at KAAP. This is a relatively recent technological development so extensive field data is not available. Manufacturers developing three-phase controllers found that their early designs tended to create serious instability problems in electric motors causing them to vibrate violently. These situations are not conducive to use in explosive production operations. Controller cost has been another factor limiting application as a 10 horsepower, three-phase controller, for instance, costs between \$400 and \$850.

Motor efficiency improvement through application of capacitors and power factor controllers is not a prime alternative for several reasons. The principal reason is that there is no direct charge in the electricity billing at KAAP for low power factor. Savings would be limited to the minor motor efficiency improvement that could be achieved and reduction of some indirect costs, such as electrical hardware requirements, through the freeing of some kilovolt-ampere capacity for use by added equipment. However, specification of power factor improvement devices on replacement or newly-required large motors may be justified and thorough investigation is recommended for future motor changes. Many motors, such as those on portable shop equipment, do not permit simple power factor improvement. Low power factor is frequently due to the nature of the applied load causing light loading during much of the period of operation. This is best improved through installation of power factor controllers but the electricity cost savings must allow amortization of the device purchase and installation cost within a reasonable time period.

To improve motor efficiency by increasing motor speed is not a major opportunity at KAAP. Most motors have been selected to operate at the correct or best speed for the application. Most motors of each rating category operate at or near 1750 revolutions per minute with few motors operating at far lower or higher speeds unless required by the application. Efficiency improvement based on motor speed increases alone should range from one to three percent based on motor size and type. This small increase is generally not sufficient to amortize the necessary investment. However, when added to the specifications for replacement or newly-required motors some additional justification is possible for thorough investigation of

this alternative.

To improve motor efficiency through the use of motors having lower horsepower ratings is possible at KAAP. Some motors may have been oversized for their application. This is not a major problem, though, so few motor locations provide economic justification for replacement. Care in specifying routine replacement motors, in recent years at least, has contributed to the limited utility of this alternative. Most motors currently active were specified for the function they are currently serving, therefore, only minor efficiency improvement for this type of change is probable.

To improve motor efficiency through application of motors specifically designed for the various applications is a minor alternative for energy reduction at KAAP as most motors have been selected for their current applications on that basis. Some minor improvement in general purpose and support area motors might be realized but significant energy and cost savings are not probable. Replacement with higher efficiency motors of the same size and type would produce greater savings at about the same expense.

To improve motor efficiency by modifying the driven equipment in some way to reduce the actual power requirement is quite complex. Each motor installation would be different from any other although repetitive production operations with identical motors could be similar. Load reduction through improved maintenance of the driven equipment might be achieved in some cases but determination of actual savings and increased operating expense would be very difficult. Load reduction through replacement of faulty driven equipment is another possibility but opportunities for such changes were not observed during the data gathering phase of this study.

KAAP MOTOR INFORMATION

To fully assess the utility of a specific motor, many factors must be considered. For this study the following motor data were accumulated: location, function, horsepower, nameplate voltage(s), nameplate amperage(s), speed, phase type, frame size, motor type, metered amperage, annual hours of operation, and approximate annual cost of electricity to operate each motor. This data was used to determine the technical and economical potential

for motor replacement or other actions which would result in reduced electrical demand. The information presented in this report is sufficiently accurate to define the magnitude of effort required to substantially reduce electrical usage and to identify the motors that can be economically modified or replaced.

Listings of the active motors at KAAP in order by building number (location) and then by horsepower rating within each building are included as Appendixes A and B. Listings of the inactive motors at KAAP in the same order are included as Appendixes C and D. Computer limitations necessitated putting only about one-half of the total motor data on a single computer file. Therefore, motors located in the 100, 200, 300, 500, 700, 800, 900 and General Areas are listed in Appendixes A and C while those in the 1000, 1100, 1200, 1400, 2000, 2100, 2200, and 3000 Areas are listed in Appendixes B and D.

All motor information, except hours of operation and electricity cost, was recorded by the electricians in the field. Metered amperages were determined by use of clamp-on ammeters. The recorded annual hours of operation for each motor was provided by plant personnel familiar with the normal duty cycle of each motor. As these values are estimates, there may be some sizeable discrepancies. Still, the apparent magnitude should be sufficiently close to actual to have an adequate confidence level in the results.

The annual cost of electricity to operate the motors was based on an average charge of four cents per kilowatt-hour. Metered amperage times line volts times annual hours times four cents per kilowatt-hour was used for calculating annual electricity costs for single phase motors. The factor 1.732 was used for three-phase motor calculations. Annual cost would increase proportionately if any of the above factors were to increase. The costs listed are based on constant loading such that the metered amperage would be required during all hours of operation. This, of course, is not completely accurate for most motors. But, the resulting costs can be used to indicate the maximum annual cost that could be expected so long as the electricity charge and hours of operation remain unchanged.

Additional motor information that could have been listed includes: motor manufacturer, year of manufacture, apparent power factor and whether or not the motor is of the explosion-proof type. This data can have a bearing on

selection of replacement motors and related costs.

An inventory of motors by manufacturer would be interesting to review but would be of minor importance in developing a motor replacement plan. Some motor manufacturers produce motors that are not identical to those having the same catalog description that are produced by other manufacturers. This problem will need to be handled on an individual motor basis.

An inventory by year of manufacture would also be interesting to review but would not be of great value in developing a motor replacement plan. Due to the cyclical nature of production at KAAP it is possible to have a 30 year old motor with fewer total hours of operation than a five year old motor. This is especially true when the newer motor is serving a function requiring near-continuous operation while the older motor has intermittent usage. The large number of motors that have been rewound add to the confusion in determining which motors have had the most extensive life.

Discussion of the relatively minor opportunity for energy reduction through application of power factor improvement devices was included under Electric Motor Efficiency Improvement Alternatives starting on page 9.

A record of which motors require explosion-proof construction was not maintained. Nearly all motors in production buildings at KAAP are required to be of this type. For replacement planning, this must be considered, but little effort is required to determine whether or not the relatively few motors for which replacement is recommended are of this type.

Table 1 on page 19 summarizes the range of electricity cost for operating motors at KAAP and provides the number of motors within each given range of annual cost. Slightly more than one-half of the active motors have a cost of \$50 or less. Fewer than ten percent have costs in excess of \$300 while only 3.2 percent have costs in excess of \$1,000. Table 2 on page 22 summarizes the range of annual hours of operation for active motors and provides the number of motors within each given range of hours. Nearly one-half of the motors operate fewer than 500 hours annually. The above facts are directly responsible for the fact that few motors at KAAP can be economically modified or replaced with more efficient motors based on current electricity costs.

The prevalence of low annual operating costs is due somewhat to the large number of fractional horsepower motors. Of the active motors, 35.6 percent are rated at one-third or one-half horsepower, 50.9 percent are rated at one horsepower or less, and only 11.2 percent are rated greater than five horsepower. These percentages would not change significantly if all inactive motors were reactivated. Table 3 on page 21 provides the number of active, inactive, and total motors of each horsepower rating and the corresponding percentage of the total each rating represents.

Explosion-proof motors are predominate in the production areas. Since more than half of the currently active motors are located in production areas it is evident that high efficiency explosion-proof motors are important to energy reduction potential at KAAP. If all inactive motors were to be reactivated, four out of five motors would be located in production areas. Table 4 on page 23 provides the number of active, inactive, and total motors located in each area and the corresponding percentage of the total each represents.

ECONOMIC EVALUATION OF MOTOR CHANGES

The methods of increasing motor efficiency were discussed above under Electric Motor Efficiency Improvement Alternatives. The largest efficiency improvement should be obtained by installing a replacement motor that has been designed to operate more efficiently than that presently installed. Speed changes, power factor improvement, switching to a smaller horsepower motor, changing to motor design, and modifying the driven equipment were alternatives considered but which, in the normal case, provide a smaller efficiency improvement than does motor replacement while the cost of change would be similar. Therefore, to simplify identification of motors which may allow economical energy reduction, the selection criteria used below is based on replacing the existing standard motors with higher efficiency replacement motors of the same horsepower, speed, frame size, and type.

The differential purchase cost between standard and high efficiency electric motors is dependent on the motor rating, frame size, type, electric service used (120 volt, single phase versus 240/480 volt, three-phase), and motor

speed. The differential purchase cost, for example, tends to increase as horsepower rating increases. The differential efficiency improvement achievable also varies somewhat with motor type and rating. For example, the efficiency gain tends to decrease as horsepower rating increases.

In order to establish the magnitude of potential for replacing motors, a single type has been used for screening purposes. The type selected is totally-enclosed, fan-cooled, which is representative of many motors at KAAP. Table 5 provides a summary of the annual present electricity costs for each motor rating that would be required so that the energy saved by improving the motor efficiency by the percentage listed would result in adequate cost savings to amortize the purchase and installation costs within a reasonable period of time.

Three basic replacement alternatives were considered. First, replacement when the present motor fails. The differential cost in this case is limited to purchase cost of the motor as the installation cost would be required anyway. Second, replacement, at this time, of a low efficiency motor that is operating satisfactorily otherwise. In this case the differential cost is motor purchase cost plus installation cost. A simple economic breakeven payback period of three years was chosen as the selection base for these two alternatives to be representative of the criteria used when production funds are used. Third, replacement through the Energy Conservation and Management (ECAM) program. This program is commonly used to procure, install, or modify facilities and/or equipment when energy savings are adequate to meet the program criteria. A discounted benefit to cost ratio of one or more is required and a ratio of mega BTU's saved annually to thousands of dollars invested equal to or greater than 13 is required at this time for the plan of action to be accepted. A four year planning cycle is the disadvantage to using ECAM funds for projects of the type being considered.

In Table 5, cost differential is based on average manufacturer prices for each motor rating. Efficiency improvement is based on averaging manufacturer information. Energy savings percentages were calculated by use of the equation: $S = 100/EA - 100/EB$ where S = energy savings, EA = standard motor efficiency, and EB = replacement motor efficiency. The quantity $EB - EA$ is equal to the efficiency improvement listed. For the case where a currently installed motor is to be replaced prior to failure, gross installation costs have been included. This

cost was set at \$100 minimum for motors up to three-quarter horsepower, \$200 minimum for motors between one and five horsepower, and \$800 minimum for motors of seven and one-half and ten horsepower. Installation costs for motors larger than 10 horsepower must be evaluated separately as few locations and applications are similar; therefore, no figures for motors over 10 horsepower are provided in Table 5 for alternatives two and three. However, the findings for the smaller motors should also apply.

A comparison of the minimum annual costs listed in Table 5 to the costs listed in Appendixes E and F, which list the motors by increasing annual cost, finds that few motors qualify for economic replacement. For the first alternative, a total of 31 motors appear to qualify. All but eight of those motors are of the explosion-proof type so actual efficiency improvement and cost savings can be questioned. For the second alternative, no motors qualify. For the third alternative, 17 motors appear to qualify but all are of the explosion-proof type. A summary of the motors that qualify, sorted by horsepower rating, is provided as Table 6. Table 7 lists the recommended replacements for the 31 motors qualifying for replacement using Alternative 1 of which 17 also qualify using Alternative 3. As Baldor was the only manufacturer found claiming to produce energy efficient explosion-proof motors, all motors recommended show the Baldor data including full load efficiency. Follow-up action has been initiated by KAAP staff to further evaluate these motors prior to seeking funds to procure replacement motors.

MOTOR DEFICIENCIES

Among the motor data included in Appendixes A and B are values for motor current to be expected at full load and the current metered during normal operation. By comparing these values for each motor it is possible to identify those motor installations where the actual load is greater than full load according to the nameplate. In some instances this excessive loading is due to the motor being operated at a voltage slightly different than that given on the nameplate. Another reason for apparent excessive loading is that most motors are subject to a service factor rating which permits overloads of 15 to 35 percent depending on motor rating and type. Most explosion-proof motors have a service factor of 1.0 but some are rated at

1.15.

Of the 854 active motors, a total of 34 appear to be loaded excessively based on the data in Appendixes A and B when the above qualifications are considered. Only 11 of those 34 have an annual electricity cost in excess of \$50. Seven of those motors are connected to air compressor units which are normally designed to operate at near full load during the duty cycle so minor overloading is not uncommon. Follow-up action has been initiated by KAAP staff to further evaluate the remaining motors prior to seeking funds to procure replacement motors. In-house rewinding will be considered where applicable.

STANDARDIZATION OF MOTORS

One method of reducing overall motor cost is to minimize the number of motor types and sizes required. A major benefit is that fast replacement of problem motors would generally be possible by having inactive motors of the same description in-plant. This would be especially helpful for motors that normally have a long delivery period. Another benefit is that manufacturers can offer price discounts when a sizeable number of identical motors are being purchased. Manufacturers can also construct motors with improved operational characteristics if the purchaser has a need for a sizeable number of identical motors and is willing to accept the longer delivery period and higher purchase price. Maintenance performed by plant personnel would be simplified to some degree due to a smaller number of motor types.

The principal limitation to standardizing motors at KAAP is the wide variety of applications of motors due to the diverse nature of ammunition load, assemble, and pack operations. The information on motor functions provided in Appendixes A, B, C, and D indicated that there are few common types of motor applications. Motors on production equipment have normally been selected specifically for the function being served so replacement with a motor of different rating, speed, frame size, or phase type is not normally a wise decision and, in some cases, cannot be done. The requirement for explosion-proof construction for about one-half of the active motors reduces the potential for standardization greatly. Potential for standardization is minimal for motors rated greater than five horsepower as most of those motors have special applications and there

are relatively few motors of each horsepower rating.

Actual energy cost savings and maintenance savings must provide adequate economic advantage to justify motor replacement for standardization purposes. This economic payback is not possible for most motor applications due to the small percentage of efficiency improvement that would be achieved and the predominance of annual electricity cost below \$200 (72.8 percent). Therefore, overall standardization of motors at KAAP is not recommended. Current government buying regulations and practices do not lend themselves to standardization, particularly where the equipment is procured and installed under Corps of Engineers contracts. Current standards are that "low bid" takes precedence over energy efficiency.

CONCLUSIONS

1. Current electric motor usage, repair and replacement practices at Kansas AAP are cost effective and energy efficient over the life-cycle of the equipment.
2. Reduction of energy consumption by replacement of motors with premium priced, higher efficiency motors was examined. Only 31 out of 854 active motors surveyed qualified for economic replacement when the present motor fails. No motors qualified for immediate replacement since the expected reduction in operating costs could not amortize the cost of a new motor in any reasonable length of time.
3. Standardization of motors and efficiency improvement through application of capacitors and power factor controllers were considered and determined not to be cost effective.
4. Care in specifying replacement motors over the years has resulted in very few motors which are oversized for their application. Corrective action will be taken in these few instances.

Table 1. Summary of annual electricity costs ^a.

<u>Annual electricity cost (\$)</u>	<u>Number of motors</u>	<u>Percentage of total</u>
0-50	438	51.2
51-100	92	10.8
101-200	92	10.8
201-300	53	6.2
301-400	18	2.1
401-500	9	1.1
501-1000	24	2.8
1001-2000	9	1.1
2000 and up	18	2.1
Undetermined ^b	<u>101</u>	<u>11.8</u>
TOTAL	854	100.0

a - Based on 4¢ per kilowatt-hour electricity charge.

b - Electricity cost is undetermined due to missing motor data. Examples include sump pump motors and exhaust fans where nameplates were inaccessible.

Table 2. Summary of annual hours of operation

<u>Number of hours</u>	<u>Number of motors</u>	<u>Percentage of total</u>
0-99	15	1.8
100-500	371	43.4
501-1000	177	20.7
1001-2000	180	21.1
2000 and up	91	10.7
Undetermined*	<u>20</u>	<u>2.3</u>
TOTAL	854	100.0

*Annual hours were not determined as most of these motors are used to support a short term engineering project. Therefore, these are not eligible for replacement. The usage of the remaining motors is very limited.

Table 3. Summary of active, inactive, and total motors sorted by horsepower rating

<u>Horsepower rating</u>	<u>Number of active motors</u>	<u>Percentage of total</u>	<u>Number of inactive motors</u>	<u>Percentage of total</u>	<u>Number of total motors</u>	<u>Percentage of total</u>
1/3	158	18.5	102	9.0	260	13.1
1/2	146	17.1	183	16.2	329	16.6
3/4	66	7.7	117	10.3	183	9.2
1	65	7.6	166	14.6	231	11.6
1-1/2	32	3.8	79	7.0	111	5.6
2	56	6.6	60	5.3	116	5.8
2-1/2	0	0.0	2	0.2	2	0.1
3	40	4.7	72	6.4	112	5.6
4	2	0.2	0	0.0	2	0.1
5	94	11.0	130	11.5	224	11.3
7-1/2	36	4.2	50	4.4	86	4.3
10	24	2.8	31	2.7	55	2.8
15	16	1.8	28	2.5	44	2.2
20	3	0.4	9	0.8	12	0.6
25	3	0.4	20	1.8	23	1.2
30	0	0.0	11	1.0	11	0.6
40	0	0.0	4	0.4	4	0.2
50	2	0.2	6	0.5	8	0.4
75	3	0.4	2	0.2	5	0.3
100	4	0.5	7	0.6	11	0.6
125	1	0.1	7	0.6	8	0.4
150	1	0.1	0	0.0	1	0.0
200	2	0.2	1	0.1	3	0.3

Table 3. (cont)

<u>Horsepower rating</u>	<u>Number of active motors</u>	<u>Percentage of total</u>	<u>Number of inactive motors</u>	<u>Percentage of total</u>	<u>Number of total motors</u>	<u>Percentage of total</u>
250	0	0.0	1	0.1	1	0.0
400	1	0.1	0	0.0	1	0.0
Undetermined*	<u>99</u>	<u>11.6</u>	<u>43</u>	<u>3.8</u>	<u>142</u>	<u>7.1</u>
TOTAL	854	100.0	1,131	100.0	1,985	100.0

* Horsepower rating of these motors was not available. Examples include sump pump motors and exhaust fans where nameplates were inaccessible.

Table 4. Summary of active, inactive, and total motors sorted by location

<u>Area</u>	<u>Number of active motors</u>	<u>Percentage of total</u>	<u>Number of inactive motors</u>	<u>Percentage of total</u>	<u>Number of total motors</u>	<u>Percentage of total</u>
General	39	4.6	0	0.0	39	3.0
100	57	6.7	4	0.4	61	2.1
200	220	25.8	9	0.8	229	11.5
300	253	29.6	7	0.6	260	13.1
500	2	0.2	51	4.5	53	2.7
700	107	12.5	1	0.1	108	5.4
800	5	0.6	60	5.3	65	3.3
900	36	4.2	192	16.9	228	11.5
1000	14	1.7	309	27.3	323	16.2
1100	30	3.5	251	22.2	281	14.2
1200	2	0.2	19	1.7	21	1.1
1400	37	4.3	4	0.4	41	2.0
2000	2	0.2	0	0.0	2	0.1
2100	18	2.1	2	0.2	20	1.0
2200	21	2.5	1	0.1	22	1.1
3000	<u>11</u>	<u>1.3</u>	<u>221</u>	<u>19.5</u>	<u>232</u>	<u>11.7</u>
TOTAL	854	100.0	1,131	100.0	1,985	100.0

Table 5. Summary of current annual electricity cost required for economic payback of motor changes*

Horsepower rating	Efficiency improvement, percent	Effective energy savings, percent	Alternate #1 differential purchase cost \$	Alternate #2 differential purchase cost plus installation \$	Alternate #3 total purchase cost plus installation \$	Alternate #1 annual electricity cost required \$	Alternate #2 annual electricity cost required \$	Alternate #3 annual electricity cost required \$
1/3	8	13.0	20	120	175	51	308	110
1/2	8	13.0	40	140	232	103	359	145
3/4	8	13.0	55	155	264	141	397	165
1	8	13.0	70	270	402	179	692	252
1-1/2	5	7.7	80	280	423	346	1,212	447
2	5	7.7	85	285	442	368	1,234	468
3	4	5.5	85	285	478	515	1,727	708
5	4	5.5	100	300	517	606	1,818	766
7-1/2	3	3.9	105	905	1,188	897	7,735	2,481
10	3	3.9	130	930	1,268	1,111	7,949	2,648
15	3	3.8	120	-	-	1,052	-	-
20	3	3.8	125	-	-	1,096	-	-
25	3	3.6	145	-	-	1,343	-	-
30	3	3.6	155	-	-	1,435	-	-
40	2	2.4	235	-	-	3,264	-	-

Table 5. (cont)

Horsepower rating	Efficiency improvement percent	Effective energy savings percent	Alternate #1 differential purchase cost \$	Alternate #2 differential purchase cost plus installation \$	Alternate #3 total purchase cost plus installation \$	Alternate #1 annual electricity cost required \$	Alternate #2 annual electricity cost required \$	Alternate #3 annual electricity cost required \$
50	2	2.4	265	-	-	3,681	-	-
75	2	2.4	590	-	-	8,194	-	-
100	2	2.4	645	-	-	8,958	-	-
125	2	2.3	760	-	-	11,014	-	-
150	1	1.1	775	-	-	23,485	-	-
200	1	1.1	990	-	-	30,000	-	-

* Based on 4¢ per kilowatt-hour electricity charge.

Table 6. Summary of motors qualifying for economic replacement

Horsepower rating	Alternate #1		Alternate #2		Alternate #3	
	Number of standard motors	Number of explosion-proof motors	Number of standard motors	Number of explosion-proof motors	Number of standard motors	Number of explosion-proof motors
1/3	5	4	0	0	0	2
1/2	0	5	0	0	0	4
3/4	0	1	0	0	0	1
1	0	8	0	0	0	7
1-1/2	0	0	0	0	0	0
2	0	1	0	0	0	1
3	0	1	0	0	0	1
5	0	1	0	0	0	1
7-1/2	0	0	0	0	0	0
10	0	1	0	0	0	0
15	3	0	0	0	0	0
20 and up	0	1	0	0	0	0
TOTAL	8	23	0	0	0	17

Table 7. Motor replacement plan

Location	Function	Explosion-proof yes/no	Annual ^a electric cost, \$	Alternate(s) ^b qualifying	Line volts	Horsepower rating	RPM	Phase	Full load eff., %	Frame size
58	Burner Motor	No	70	1	115	1/3	1725	1	56	56C
112	Boiler Chemical Mixer	No	63	1	115	1/3	1725	1	56	48
112	Boiler Fuel Oil Feed	No	69	1	208	1/3	3450	3	65	48
315	#7 Connolly Feed Out	Yes	57	1	460	1/3	1725	3	74	56 ^c
315	Shell Walker	Yes	166	1, 3	208	1/2	1725	3	74	56C
315	Shell Walker	Yes	178	1, 3	208	1/2	1725	3	74	56C
315	West End Crossover	Yes	204	1, 3	208	1/2	1725	3	74	56C
315	Banding Conveyor Motor	Yes	197	1	208	1	1725	3	75	56
315	Hydraulic Pump	Yes	1,658	1	208	10	1140	3	85	256T
324	Lead Cup #2 Conveyor	Yes	62	1	208	1/3	1725	3	74	56
701	East Air Compressor	Yes	254	1, 3	115	1/2	1725	1	65	56
703	Air Compressor	Yes	260	1, 3	208	1	1140	3	77	145T
705	Air Handler	Yes	911	1, 3	460	3	1725	3	82	182T
705	Air Compressor	Yes	975	1, 3	208	5	1725	3	85	184T
708	Air Compressor	Yes	275	1, 3	208	1	1740	3	80	182 ^c
724	Water Feed Pump #1	No	1,195	1	208	15	3525	3	84	254T
724	Water Feed Pump #2	No	1,266	1	208	15	3525	3	84	254T
724	Water Feed Pump #3	No	1,259	1	208	15	3525	3	84	254T
732	Condenser Fan	Yes	116	1, 3	208	1/3	1725	3	74	56

Table 7. (Cont.)

Location	Function	Explosion-proof yes/no	Annual ^a electric cost, \$	Alternate(s) ^b qualifying	Line volts	Horsepower rating	RPM	Phase	Full load eff., %	Frame size
733	Air Compressor	Yes	157	1, 3	115	1/3	1725	1	56	56
736	Air Compressor	Yes	670	1, 3	208	1	1740	3	80	182 ^c
739	Air Compressor	Yes	485	1, 3	208	2	1725	3	80	145T
740	Exhaust Fan	Yes	117	1	115	1/2	1725	1	65	56
741	Air Compressor	Yes	170	1, 3	115	3/4	1725	1	66	56
741	Condensor Fan	Yes	296	1, 3	208	1	1725	3	75	56
741	Condensor Fan	Yes	296	1, 3	208	1	1725	3	75	56
741	Condensor Fan	Yes	296	1, 3	208	1	1725	3	75	56
741	Condensor Fan	Yes	308	1, 3	208	1	1725	3	75	56
902	Chemical Feed Pump	No	69	1	115	1/3	1725	1	56	56
904	Air Compressor	Yes	1,399	1	460	25	1160	3	91	324T ^c
2106	Burner Motor	No	83	1	115	1/3	1725	1	56	56C

a. Based on 4c per kilowatt-hour electricity charge.

b. Based on data in Table 5.

c. No exact, energy efficient replacement was found. The motor recommended will require frame alteration.

APPENDIX A

ACTIVE MOTORS SORTED BY LOCATION AND BY HORSEPOWER RATING AT EACH LOCATION -
BUILDING NUMBERS BELOW 999

DAY AND ZIMMERMANN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
052	BENCH GRINDER	.33	1000	1	110 115	4.6	---	K	12747	115	4.6	3.6	100	2
052	BOILER OIL PUMP	.33	1725	1	115 208 230	6.0	56C	---	---	115	6.0	---	1500	---
052	OVERHEAD HEATER	.75	1725	1	115 230	10.4	73A	KC	---	115	10.4	11.0	500	25
052	CONDENSATE PUMP	.75	3450	3	208 220 440	2.5	656	PFV3	---	208	2.5	1.2	200	3
052	AIR COMPRESSOR	3.00	1725	3	208 416	8.4	182T-623M	---	93321	208	8.4	7.5	500	54
053	FUEL OIL BURNER	.33	1725	1	115 230	6.0	56C	VL	72792	115	6.0	2.9	2016	27
053	TENSILE TEST MACHINE	.33	1725	1	115 230	6.4	56C	KFU3	93550	115	6.4	2.6	100	2
053	OVERHEAD HEATER	.50	1075	1	115 230	5.8	K56	CC	NONE	115	5.8	5.9	100	3
053	OVERHEAD HEATER	.50	1075	1	115 230	5.8	K56	CC	275395	115	5.8	5.8	100	3
053	OVERHEAD HEATER	.50	1075	1	115 230	5.8	K56	CC	275397	115	5.8	5.7	100	3
053	BLOWER MOTOR	.50	1725	1	115 230	7.0	63A	KC	41177	115	7.0	6.6	2016	61
053	CONDENSATE PUMP	.50	1735	3	208 416	1.6	---	---	45511	208	1.6	0.6	200	2
053	TENSILE TEST MACHINE	.75	1725	3	230 460	3.0	56C 513M	---	94551	208	3.0	2.1	100	3
053	AIR HANDLER MOTOR	2.00	1735	3	200	6.8	145T	TDR-BE	96368	208	6.8	---	2016	191
057	SUMP PUMP	.33	1725	1	115	10.0	---	---	---	208	10.0	8.6	100	4
057	CONDENSATE PUMP	.50	1725	3	208 416	1.6	---	---	---	208	1.6	1.0	200	3
057	SAW MOTOR	5.00	1730	3	230 460	13.2	184T	TFL	98594	208	13.2	5.8	100	9
057	PUMP MOTOR	---	---	---	---	---	---	---	98594	---	---	2.2	100	---
058	BLOWER MOTOR	.33	1725	3	220	1.1	45A	K	79478	208	1.2	---	300	---
058	BURNER MOTOR	.33	1725	1	115 230	6.0	566	---	71449	115	6.0	7.5	2016	70
058	SUMP PUMP	.33	1725	1	115	10.0	---	---	NONE	115	10.0	6.5	100	3
058	BLOWER MOTOR	.33	1725	3	220	1.1	45A	K	79481	208	1.2	---	300	---
058	BLOWER MOTOR	.33	1725	1	230	3.3	58562	FHT	NONE	230	3.3	---	300	---
058	BLOWER MOTOR	.33	1740	3	220	1.1	45A	K	79476	208	1.2	---	300	---
058	AIR HANDLER MOTOR	.33	3450	3	230 460	1.8	48	---	NONE	208	2.0	1.3	1500	18
058	CONDENSER FAN MOTOR	.50	1075	1	115 230	5.8	K56	CC	NONE	115	5.8	---	750	---
058	BLOWER MOTOR	.50	1750	---	---	---	A	E12	02389	---	---	4.1	300	---
058	AIR HANDLER MOTOR	.75	1725	1	115 230	10.4	H56	RK-3	85887	115	10.4	---	300	14
058	CONDENSATE PUMP	.75	3450	3	208 230 460	2.6	56	---	95133	208	2.6	1.2	200	3
058	BLOWER MOTOR	1.00	1740	3	220 440	3.8	---	---	61876	208	4.0	---	300	---
058	AIR HANDLER MOTOR	1.50	3450	3	220 440	4.4	56	---	NONE	208	4.7	1.9	2016	59
058	AIR HANDLER MOTOR	2.00	1735	3	200	6.8	145T	TDR-BE	NONE	208	6.6	6.3	1500	132
058	AIR COMPRESSOR	3.00	1750	3	208	8.9	225	ES	05339	208	8.9	8.0	1000	116
058	AIR HANDLER COMPRESS	---	---	---	---	---	---	---	78268	208	---	14.4	1000	120
060	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	8.7	100	---
080	AIR COMPRESSOR	1.50	1500	3	208 416	4.7	59-5	SC	40999	208	4.7	4.7	1000	68
080	RADIAL ARM SAW	3.00	3425	3	220 440	14.7	686	---	NONE	208	14.7	12.0	1000	173
080	RADIAL ARM SAW	7.50	3425	3	208 220 440	20.0	712	---	089352	208	20.0	20.0	1000	288
080	SANDUST VACUUM	---	---	---	---	---	---	---	66090	208	---	16.7	1000	241
102	SUMP PUMP	.33	1725	1	115	10.0	---	---	NONE	115	10.0	7.0	100	3
102	DUPPLICATOR	.33	1725	1	115	5.7	---	---	96536	115	5.7	5.5	1200	30
102	PAPER PUNCH	.33	1725	1	115	6.2	F48	SPS	089852	115	6.2	6.0	100	3
102	DUPPLICATOR	.50	1725	1	115	8.4	56	---	96536	115	8.4	8.0	1200	44
102	EXHAUST FAN	.75	1750	1	115 230	10.4	C66	---	70927	115	10.4	---	100	---
102	EXHAUST FAN	.75	1750	1	115 230	10.4	C66	---	70974	115	10.4	---	100	---
102	CONDENSATE PUMP	.75	3450	3	208 230 460	2.6	56	---	96567	208	2.6	1.4	500	10
102	PAPER CUTTER	3.00	1745	3	208	10.4	182T	SC	092888	208	10.4	8.5	100	12
102	AIR COMPRESSOR	3.00	1750	1	110 220	37.2	225	RA	80155	115	35.6	23.0	750	137
104	SUMP PUMP	.33	1725	1	115	10.0	---	A771E	NONE	115	10.0	8.5	100	4
104	CONDENSATE PUMP	.75	3450	3	208 230 460	2.8	56	---	97902	208	2.8	1.8	100	2
105	SUMP PUMP	.33	1750	1	110	10.0	---	---	NONE	115	9.6	8.0	100	4
105	CONDENSATE PUMP	.75	3450	3	208 230 460	2.6	56	---	96571	208	2.6	1.2	250	3

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMP	METER	AN HRS	AN COST
106	SUMP PUMP	.33	1725	1	115	---	---	---	NONE	115	---	8.0	100	4
106	BENCH GRINDER	.33	3450	1	115	---	320C	---	NONE	115	4.2	3.0	50	1
106	CONDENSATE PUMP	.75	3450	3	230	460	K56	P	NONE	208	2.7	2.5	100	3
107	HOT WTR RETURN PUMP	.50	1750	3	208	230	460	---	NONE	208	1.8	1.5	1000	21
107	AIR COMPRESSOR	.50	---	1	115	230	---	---	NONE	115	8.6	7.5	1000	35
107	CHILL WATER RETURN	1.00	1725	3	208	230	460	SC	NONE	208	3.4	3.0	1000	43
107	CONDENSATE PUMP MTR	1.00	---	3	200	---	M56	P	NONE	208	4.4	4.0	500	29
107	DUCT BLOWER MOTOR	1.00	---	3	208	---	---	---	NONE	208	4.0	4.0	2000	116
107	COOL DISCHRG BLOWER	5.00	1735	3	200	---	R184T	COG4B	NONE	208	15.7	14.0	2016	407
107	DUCT BLOWER MOTOR	5.00	---	3	208	---	184T	K	NONE	208	16.2	14.0	2000	404
107	CONDENSOR MOTOR	5.00	---	3	208	---	---	---	NONE	208	13.6	14.7	1000	211
107	REFRIG COMPRESSOR	---	---	3	208	---	---	---	NONE	208	121.0	75.0	1000	2390
112	BOILER FUEL OIL PUMP	.33	1725	3	208	230	460	---	80236	208	1.1	1.6	3000	43
112	BOILER FUEL OIL PUMP	.33	1725	3	208	220	---	---	---	208	1.1	1.6	3000	43
112	BOILER CHEM MIXER	.33	1725	1	115	---	---	---	NONE	115	5.0	4.6	3000	63
112	WATER SOFTENER EAST	.33	1725	1	115	230	---	---	79236	115	6.6	3.0	500	12
112	WATER SOFTENER WEST	.33	1725	1	115	230	---	---	79235	115	6.6	3.6	500	15
112	BOILER FUEL OIL FEED	.33	3450	3	208	220	460	---	---	208	1.5	1.6	3000	69
112	DRYER 088518	.50	1725	3	208	220	440	4841GM	---	208	1.9	1.8	750	19
112	DRYER 088518	1.50	1730	3	208	220	440	---	088520	208	4.2	3.6	750	38
112	DRYER TUMBLER	2.00	1000	3	208	220	440	184	088519	208	7.4	3.6	750	38
112	DRYER TUMBLER 85768	2.00	1000	3	208	220	440	213	085772	208	7.4	3.6	750	38
112	DRYER TUMBLE 085770	2.00	1000	3	208	220	440	213	085771	208	7.4	4.0	750	43
112	WASHING MACH 087222	3.00	1740	3	230	460	---	---	085773	208	7.4	3.6	750	38
112	WASHING MACH 087222	3.00	1740	3	208	220	440	182T	---	208	10.9	5.6	750	68
112	WASHER 085746	5.00	1650	3	208	220	440	213	087223	208	6.7	6.7	750	73
112	WASHER 085746	5.00	1650	3	208	416	---	---	087224	208	14.4	9.2	750	99
112	WASHER 085746	5.00	1650	3	208	416	---	---	085845	208	14.4	12.0	750	138
112	WASHER 085746	5.00	1650	3	208	416	---	---	085744	208	14.4	10.0	750	107
112	WASHER 085746	5.00	1650	3	208	416	---	---	085847	208	14.4	8.7	750	94
112	WASHER 085746	5.00	1650	3	208	416	---	---	085745	208	14.4	10.0	750	138
112	WASHER 085746	5.00	1650	3	208	416	---	---	085849	208	14.4	11.4	750	123
112	WASHER 085746	5.00	1650	3	208	416	---	---	085843	208	16.0	13.0	750	140
112	WASHER 085746	5.00	1650	3	208	416	---	---	087223	208	14.8	9.7	750	186
112	WASHER 085746	7.50	1700	3	208	416	---	---	085742	208	21.6	23.0	750	249
112	WASHER 085746	7.50	1700	3	208	416	---	---	085846	208	21.6	21.5	750	232
112	CONDENSATE PUMP	7.50	1745	3	200	400	---	---	NONE	208	22.5	18.0	1000	260
112	BOILER BLOWER	7.50	1735	3	220	440	---	---	08251	208	20.8	17.0	3000	734
112	DRYER BLOWER	10.00	1735	3	208	220	440	284	---	208	28.8	20.5	750	225
112	DRYER BLOWER 085770	10.00	1735	3	208	220	440	215T	NONE	208	28.8	20.5	750	225
112	DRYER BLOWER 85768	10.00	1735	3	208	220	440	215T	NONE	208	28.8	20.5	750	225
112	DRYER BLOWER 85768	10.00	1735	3	208	220	440	215T	NONE	208	28.8	20.5	750	225
114	SUMP PUMP	.33	1750	1	110	---	---	---	NONE	115	9.7	8.2	100	4
162	SUMP PUMP	.33	1725	1	115	---	---	---	NONE	115	10.0	8.0	100	4
186	WATER PUMP MOTOR	2.00	3450	3	208	220	440	M56	NONE	208	5.9	5.0	2016	145
186	FEED PUMP MOTOR	5.00	1750	3	220	440	---	---	NONE	208	14.4	12.5	2016	385
186	BURNER MOTOR	7.50	1750	3	208	220	440	284	NONE	208	21.2	1.7	1500	433
201	EXHAUST FAN	1.50	1725	1	115	230	---	---	NONE	230	9.2	8.0	100	8
201	HEATER OIL MOTOR	---	---	---	---	---	---	---	62347	---	---	---	---	---
201	PAPER BALER	10.00	1745	3	230	460	---	---	---	208	28.8	20.0	100	42
202	7TH N OH DOOR OPENER	.33	1725	1	115	---	---	---	97239	208	5.6	5.3	300	8
202	RIVET SET	.33	1725	1	115	---	---	---	27255	115	5.6	5.1	50	1
202	2ND N OH DOOR OPENER	.33	1725	1	115	---	---	---	78046	115	5.6	5.3	300	8
202	W OVERHEAD DOOR OPEN	.33	1725	1	115	---	---	---	7256	115	5.6	5.1	300	8
202	4TH N OH DOOR OPENER	.33	1725	1	115	---	---	---	NONE	115	5.6	5.3	300	8

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST	
202	8TH N OH DOOR OPENER	.33	1725	1	115	5.6	562	---	47252	115	5.6	7.0	300	8	
202	DELTA DRILL PRESS	.33	1725	1	110	6.3	165	SS	79153	115	6.0	5.5	100	3	
202	SUMP PUMP	.33	1725	1	115	10.0	---	---	NONE	115	10.0	8.5	100	4	
202	5TH N OH DOOR OPENER	.33	1725	1	115	5.6	562	---	47251	115	5.6	6.3	300	8	
202	6TH N OH DOOR OPENER	.33	1725	1	115	5.6	562	---	NONE	115	5.6	5.5	300	8	
202	DRILL PRESS	.33	1740	3	230	---	115	---	04547	208	---	1.0	200	3	
202	N OVERHEAD DOOR OPEN	.33	1750	1	115	2.8	---	---	NONE	115	5.6	5.7	300	8	
202	BENCH GRINDER	.33	3450	1	115	4.1	---	---	67174	115	4.1	3.9	50	1	
202	DRILL PRESS	.50	1140	3	208	1.9	750	K	75364	208	1.9	1.5	100	2	
202	DRILL PRESS	.50	1725	1	115	7.6	1186	K.B.	46110	115	7.6	6.1	100	3	
202	3RD N OH DOOR OPENER	.50	1725	1	115	5.6	562	---	47254	115	5.6	5.1	300	8	
202	HONING MACHINE	.50	1725	1	115	8.8	56	---	97394	115	8.8	7.5	50	2	
202	BENCH GRINDER	.50	3450	1	110	6.2	118	---	79226	115	5.9	3.5	100	7	
202	BORING BAR	.50	3450	1	115	6.0	---	---	68899	115	6.0	8.6	50	1	
202	BENCH GRINDER	.50	3450	3	208	1.6	---	VHA	13174	208	1.6	1.0	100	2	
202	BENCH GRINDER	.50	3450	1	110	1.3	---	---	45042	115	1.2	1.9	100	1	
202	HEATER FAN MOTOR	.75	1725	3	208	4.16	---	---	71927	208	1.3	1.5	1000	21	
202	STEAM CLEANER PUMP	.75	1725	1	115	230	B56	F2	96074	115	13.0	11.7	100	5	
202	OVERHEAD HEATER	.75	1725	1	115	230	---	---	45717	115	10.0	5.5	100	5	
202	TRANE OH HEAT UNIT	.75	1750	3	220	440	---	---	78944	208	2.6	3.1	1000	47	
202	CONDENSATE PUMP DRIV	.75	3450	3	208	220	G56	PFU3	NONE	208	2.5	2.1	300	9	
202	CAR WASHER	1.00	1725	1	115	14.0	F56	KD	98539	115	14.0	13.9	300	19	
202	N OVERHEAD HEAT FAN	1.00	1750	3	208	---	---	---	41244	208	3.2	2.5	1000	36	
202	BENCH GRINDER	1.00	1800	1	110	115	---	C	18461	115	13.0	10.5	100	6	
202	FORKLIFT HOIST	1.50	1725	3	208	230	56C	---	97910	208	5.0	3.1	50	2	
202	FLOOR HEATER	1.50	1740	3	220	440	224	---	41313	208	4.9	4.1	100	7	
202	FLOOR HEATER	1.50	1740	3	220	440	---	---	66474	208	4.9	3.7	100	4	
202	BLOWER HEATER	2.00	1140	3	208	416	225	EM	75290	208	6.6	5.0	100	7	
202	AIR COMPRESSOR	2.00	1745	3	208	---	145T	SC	88940	208	6.6	4.0	300	28	
202	PEDESTAL GRINDER	2.00	1800	3	220	440	---	2H5AG	24868	208	6.4	3.1	100	9	
202	HYDRAULIC HOIST (NO)	3.00	1140	3	220	440	254	K	05947	208	9.8	5.5	200	28	
202	HYDRAULIC HOIST (SO)	3.00	1140	3	220	440	254	K	05946	208	9.8	6.1	200	28	
202	AIR COMP FORKLIFT SH	5.00	1735	3	220	---	254	K	03727	208	15.5	14.8	200	45	
202	ARMATURE LATHE	---	---	---	---	---	---	---	79027	---	---	4.1	50	---	---
202	OSCILLATING FAN	---	---	1	110	120	---	---	083625	115	0.7	0.9	100	1	
202	WATER COOLER	---	---	1	115	---	---	---	092079	115	4.2	3.5	50	1	
202	WATER COOLER	---	---	1	115	---	---	---	83511	115	4.0	3.5	100	2	
202	VALVE REFACER MOTOR	---	---	---	---	---	---	---	93734	---	---	6.6	50	---	---
202	AIR CONDITIONER	---	---	---	---	---	---	---	89965	115	---	9.5	100	4	---
202	OSCILLATING FAN	---	---	1	115	---	---	---	96196	115	0.7	0.9	100	1	
202	AIR CONDITIONER	---	---	---	---	---	---	---	9002-	---	---	8.9	100	4	---
202	CONDENSATE PUMP	---	---	---	---	---	---	---	---	---	---	2.1	100	---	---
202	VALVE REFACER MOTOR	---	---	---	---	---	---	---	93734	---	---	1.5	50	---	---
202	BATT. A. OH EXHS FAN	---	---	3	208	---	---	---	---	208	---	7.1	2016	206	---
202	OSCILLATING FAN	---	---	1	110	120	---	---	083700	115	0.7	0.9	100	1	---
202	AIR CONDITIONER	---	---	---	---	---	---	---	93768	---	---	8.8	100	---	---
202	AIR CONDITIONER	---	---	---	---	---	---	---	90027	---	---	8.6	100	4	---
202	AIR COMPRESSOR	10.00	3500	3	220	440	284	JEX	78902	208	26.5	30.5	300	114	---
203	AIR COND FAN MOTOR	.33	1100	1	208	230	DU48	FLL	96479	230	1.5	1.4	200	2	---
203	PRESSURE PUMP TEST	.33	1725	1	115	---	48	---	NONE	115	6.3	---	100	---	---
203	DRILL PRESS	.33	1740	3	220	---	---	PA88	45543	208	1.3	1.0	100	2	---
203	BENCH GRINDER	.33	3450	1	115	---	---	CR200	68028	115	6.2	5.9	100	3	---

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
203	PEDESTAL GRINDER	.33	3600	1	115	4.5		K	19659	115	4.5	3.2	100	2
203	RADIAL PRESS TABLE	.50	500	3	220 440	6.2	A66	SPLT	73918	208	6.6	6.1	100	9
203	DRILL PRESS	.50	1075	1	115 230	5.8	K56		90598	115	5.8	3.2	100	3
203	CINCIN CHUCK MOTOR	.50	1140	3	230	2.2			92766	208	2.5	2.7	200	7
203	HEATER MOTOR	.50	1725	1	115 230	7.0	63A		8943	115	7.0	5.2	100	3
203	COOLANT PUMP	.50	1725	3	208 416	2.0			98285	208	2.0	2.7	200	5
203	DISC SANDER	.50	1725	1	115 230	8.6	56		91041	115	8.6	4.5	100	4
203	ROCKWELL DRILL PRESS	.50	1725	3	230 460	1.6		510M	089692	208	1.8	1.0	100	2
203	COIL WINDER	.50	1725	1	110 220	8.8	RM720	B-LINE	62474	115	8.4	8.7	100	4
203	AIR HANDLER	.50	1725	1	115 230	7.0	63A		8942	115	7.0	4.3	100	3
203	VACUUM PUMP	.50	1725	1	115 230	8.4	56		NONE	115	8.4	8.2	100	4
203	LATHE MOTOR	.50	1725	3	208 220 440	1.7	66	FS	74640	208	1.7	1.3	200	3
203	ENGINE LATHE	.50	1725	3	208 220 440	1.6	J56	PA	96553	208	1.6		1200	
203	DRILL PRESS	.50	1760	3	220 440	2.0			74642	208	2.1	1.4	100	3
203	BUFFER/MOTOR	.50	3450	1	115	5.0	5324C		89244	115	5.0	2.4	100	2
203	GRINDER BUFFER	.50	3450	1	115	5.0	5324C		089243	115	5.0	2.7	100	2
203	BALDOR GRINDER	.50	3450	1	115	4.8	153C		71999	115	4.8	3.3	100	2
203	PEDESTAL GRINDER	.50	3450	3	220 440	1.4	153M		74199	208	1.5	0.7	100	2
203	NORTON CHUCK MOTOR	.75	1135	3	220 440	5.1	203	K	75458	208	5.4	3.7	200	16
203	PUMP MOTOR	.75	1150	3	220 440	2.8	203		NONE	208	3.0	2.8	200	9
203	DELTA DRILL PRESS	.75	1725	3	220 440	2.2	47	PA	79537	208	2.3	1.5	100	3
203	CONDENSATE PUMP	.75	3450	3	208 220 440	2.5	G56		95126	208	2.5	1.9	100	3
203	ENGINE LATHE	1.00	1200	3	208 220 440	3.5	184C	HV	96553	208	3.5		1200	
203	JIG BORE TABLE MOTOR	1.00	1600	3	220 440	4.0	612	PTB	91741	208	4.2		1000	
203	JIG BORE SADDLE MOTO	1.00	1600	3	220 440	4.0	612	PTB	91741	208	4.2	4.4	1000	64
203	G.E. BUFFER	1.00	1720	3	220 440	3.2	203	M		208	3.4	2.0	100	5
203	LOUIS ROCKF SHAPER	1.00	1720	3	220 440	7.6	163		64510	208	8.0	10.0	100	12
203	DELTA GRINDER	1.00	1725	3	225 440	2.8	182	IS	3451	208	1.6	1.6	100	5
203	OH AIR HANDLER WEST	1.00	1725	3	220 440	3.0	N203		8940	208	3.2	1.9	500	23
203	METAL ROLL	1.00	1725	3	208 230 460	3.6	1.7 143T		96670	208	3.6	1.0	100	5
203	TRENT MOTOR OVEN	1.00	1725	3	208 220 440	3.0	56CZ		95151	208	3.0	1.7	50	3
203	JIG BORE SPINDLE MTR	1.00	1725	3	220 440	3.9	612	PT	91741	208	4.1		1000	
203	WELLS BANDSAW	1.00	1750	3	020 440	3.3	A208		65981	208	3.5	2.5	100	5
203	CROSS FEED	1.00	1800	3	220 440	3.8	184	MLE	97319	208	4.0	3.8	200	12
203	GRINDER MOTOR	1.00	3400	3	208 220 440	3.6	1.4 LJX42	L	90922	208	3.6	1.5	200	9
203	FAN MOTOR	1.00	3450	3			48		93114			2.7	100	
203	BAND SAW	1.00	3450	3	220	3.2	204	PM	76744	208	3.4	2.6	500	19
203	PORTABLE AIR COMPRES	1.00	3450	1	115 230	15.0	G56		092157	115	15.0	14.2	100	7
203	ELEC INSIDE GRINDER	1.00	3450	3	220 440	2.8	J56Y	TA	92766	208	3.0	3.8	200	9
203	GRINDER/MOTOR	1.00	3500	3	208 220 440	2.7	56R		97892	208	2.7	1.7	100	3
203	PORTABLE PIPE THREAD	1.00		1	110	15.0			090689	115	14.4	9.4	100	4
203	EXHAUST FAN EAST	1.50	1000	1	115 230	18.4	184	KC	91056	115	18.4	7.5	100	8
203	EXHAUST FAN WEST	1.50	1000	1	115 230	18.4	184	KC	91058	115	18.4	7.6	100	8
203	HARDING LATHE	1.50	1700	3	208 220	3.6	215	P	98545	208	3.6	3.0	200	10
203	DRILL PRESS ELEV MTR	1.50	1700	3	220 440	5.8	518S	CTK	71732	208	6.1	3.7	100	9
203	TRACING MIL GUILL	1.50	1700	3	208 220 440	5.1	145TY-4	TVY	92695	208	5.1	2.5	1000	36
203	ELEC SHP EXHAUST FAN	1.50	1725	3	208	6.1			NONE	208	6.1	2.3	100	9
203	DELUG PUMP MOTOR	1.50	1725	3	208 220 440	4.6	2.3 184			208	4.6	3.4	200	14
203	ROCKWELL DRILL PRESS	1.50	1725	3	230 460	4.8	C66Y	TDR-BZ	093078	208	5.3	2.1	100	7
203	ELEC SHP EXHAUST FAN	1.50	1725	3	208	6.1			NONE	208	6.1	3.9	100	9
203	END MILL SPINDLE MTR	2.00	1725	3	230 460	5.8	210P	PS	96300	208	7.1	3.1	1000	45
203	DRILL PRESS	2.00	1725	3	208 220 440	5.8	224	TS	78623	208	5.8	4.7	200	14

DAY AND ZIMMERMANN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

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203	OH AIR HANDLER EAST	2.00	1730	3	208 220 440	6.7 6.8	3.4	184	8944	208	6.7	5.2	500	48
203	FEED MTR MILL MACH	2.00	1730	3	208 220 440	6.0 3.0	184	K	94688	208	6.0	13.6	200	17
203	PEDESTAL GRINDER	2.00	1800	3	220	6.2		2H5AG	02574	208	6.6	3.1	100	5
203	HYDRAULIC MOTOR	2.00	1800	3	208 220			145T	93114			6.3	100	
203	GRINDER MOTOR	2.00	3450	3	208 220	6.8 6.0	2040	LB	95589	208	6.8	4.0	200	21
203	DO-ALL BANDSAW	2.00		3	220	9.0			90699	208	9.5	4.5	100	14
203	WEBB METAL ROLL	3.00	1150	3	208 220 440	10.0 10.2	5.1	213T	92651	208	10.0	6.5	100	14
203	BROWN & SHARP MILL	3.00	1650	3	220 440	8.6 4.3	213	PSD1	97319	208	9.1	5.3	200	26
203	POWER HACKSAW	3.00	1725	3	220 440	8.5 4.2	225	K	79006	208	8.9	4.5	200	12
203	RADIAL PRESS SPINDLE	3.00	1740	3	220 440	8.4 4.2	225		73918	208	8.9	4.1	100	12
203	TRAC MILL HYDR PUMP	3.00	1800	3	230 460	8.4 4.2	AVO-184	DOO-29	92695	208	9.3	3.9	1000	57
203	PIPE THREADER	3.00		3	220				96433	208		11.3	100	16
203	MILLIN MACHIN SPINDL	4.00	1720	3	208	13.2		182TY	97879	208	13.2	6.0	500	87
203	MILL MACH SPIND MTR	4.00	1730	3	220 440			51909	97815	208		5.1	1000	73
203	DRILL PRESS SPND MTR	5.00	1160	3	220 440	18.0 9.0	2518L	CTA	71732	208	19.0	9.7	100	28
203	NIGARA SHEARS	5.00	1735	3	220 440	15.8 7.9	60205	OZA	68680	208	16.7	15.1	100	24
203	PEERLESS SAW/MOTOR	5.00	1740	3	208 230 440	14.8 7.4	F184T	TD	96490	208	14.8	9.2	200	43
203	REL ROCKFORD LATHE	5.00	1750	3	220 440	14.4 7.2	CB254		63802	208	15.2	5.5	100	23
203	PEDESTAL GRINDER	5.00	1750	3	220	13.2		GPEA	63931	208	14.0	6.5	100	21
203	CINCINNATI GRINDER	5.00	1750	3	220	13.2		GPEA	63932	208	14.0	8.0	200	40
203	NORTON GRINDER MOTOR	5.00	3460	3	220 440	14.2 7.1	225	K	75457	208	15.0	7.0	200	43
203	AIR COMPRESSOR	7.50	750	3	208	20.6	284	OX	0104799	208	20.6	20.6	100	29
203	WEBB METAL ROLL	7.50	1165	3	208 220 440	22.3 22.2	11.1	254T	92651	208	22.3	10.1	100	33
203	WEST ROCKFORD SHAPER	7.50	1165	3	220 440	21.0 10.5	324		64508	208	22.2	16.0	100	31
203	GRINDER MOTOR	7.50	1740	3	220 440	5.8 2.9	224	APK	92766	208	6.1	4.3	200	27
203	MILLING MACH COOLANT								97815			0.3	1000	3
203	MONARCH LATHE			3	208	25.0			093117	208	25.0	10.7	200	73
203	PIPE THREADER								091222			3.8	100	
203	LUCAS MILL								089370			6.9	1000	
203	HOIST MOTOR											4.5	100	
203	HYDRAULIC PUMP MOTOR											63.0	100	
203	MILLING MACH TABLE								97815			2.2	1000	18
203	AIR CONDITIONER			1	208 230	9.3 8.6			96478	208	9.3	1.8	100	2
203	WATER COOLER MOTOR			1	115	4.0			65449	115	4.0	3.5	100	2
203	WATER COOLER MOTOR			1	115	3.4			65475	115	3.4	2.3	100	1
203	DUMORE HIGH SP DRILL		17000	1	115	8.0			7986	115	8.0	0.5	100	4
203	HIGH SPEED GRINDER		30000	1	115	2.5			ST280	115	2.5	1.7	100	1
203	BRAKE PRESS	10.00	1620	3	220 440	27.0 13.5			92655	208	28.6	22.7	100	42
203	SPINDLE MOTOR	10.00	1760	3	208 220 440	26.8 13.4	256U	K	94688	208	26.8	9.7	200	78
203	SURFACE GRINDER	15.00	1160	3	208	4.5	0332S	CTX	98285	208	4.5	5.0	200	12
203	LEBLOND LATHE	15.00	1745	3	220 440	39.2 19.6	326		85480	208	41.5	13.1	200	120
203	ENGINE LATHE POWER TU	20.00	1750	3	220 440	53.6 26.8	256T		96453	208	56.7	18.5	200	163
203	ENGINE LATHE	25.00	1760	3	220 440	62.6 31.3	364Y	K	96553	208	66.2		1200	
207	BENCH GRINDER	.50	3450	1	115	5.8	D56Y	KN	092148	115	5.8	4.3	100	3
207	BENCH GRINDER	.50	3450	1	115	4.8	153C		71998	115	4.8	3.5	100	2
207	ROCKWELL DRILL PRESS	.75	1725	3	230 460	3.0 1.5		513M	93576	208	3.3	2.0	100	3
207	PORTABLE AIR COMPRES	1.00	1725	1	115 230	14.0 7.0	182		90682	115	14.0	11.5	200	13
207	COMB BELT & DISC SAN	1.00	1730	3	208 416	3.2 1.6	A204	T	NONE	208	3.2	2.3	100	5
207	8" JOINTER	1.00	3450	3	200	3.7	C56	TF	98368	208	3.6	2.7	50	2
207	BRICK SAW MOTOR	1.50	3450	1	115 230	18.2 9.1	56		92595	230	9.1	5.3	50	1
207	ROCKWELL BANDSAW	2.00	1725	3	230 460	6.0 3.0	F66Y	TDR-67	093076	208	6.6	4.0	100	10
207	ROCKWELL RADIAL SAW	3.00	3450	3	230 460	8.2 4.1	56Y	TS	993079	208	9.1	4.5	100	16

DAY AND ZIMMERMAN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
207	10" UNISAW	3.00	3450	3	230 460	7.4 3.7	---	620M	093077	208	8.2	3.5	50	5
207	TABLE SAW	5.00	3450	3	208 220 440	14.0 7.0	525	ST	48007	208	14.0	7.5	300	61
207	PLANNER	5.00	3600	3	208 220 440	13.2 14.4	AFO-22	P000	93604	208	13.2	9.9	50	9
207	TOPS RADIAL SAW	7.50	3450	3	208 220 440	22.0 11.0	---	---	092903	208	22.0	20.0	200	64
207	LEONARD AIR COND	---	---	---	---	---	---	---	---	---	---	9.0	100	---
207	AIR CONDITIONER	---	---	---	---	---	---	---	---	---	---	---	200	---
207	WATER COOLER	---	---	---	---	---	---	---	---	---	---	---	200	---
207	SANDUST COLLECTOR	10.00	3480	3	115	---	---	---	60815	115	---	0.3	100	---
208	AIR CONDITIONER	---	---	---	208 416	26.4 13.2	284	CS	27011	208	26.4	23.7	300	114
208	AIR CONDITIONER	---	---	---	---	---	---	---	0369	---	---	5.2	200	---
208	AIR CONDITIONER	---	---	---	---	---	---	---	0366	---	---	1.9	200	---
208	AIR CONDITIONER	---	---	---	---	---	---	---	0364	---	---	7.1	200	---
208	AIR CONDITIONER	---	---	---	---	---	---	---	0368	---	---	1.0	200	---
208	AIR CONDITIONER	---	---	---	---	---	---	---	0367	---	---	1.4	200	---
208	AIR CONDITIONER	---	---	---	---	---	---	---	0365	---	---	8.0	200	---
209	SUMP PUMP MOTOR	.33	1725	1	115	---	---	---	NONE	115	10.0	5.8	100	3
209	OIL PUMP MOTOR	.50	1725	1	115 230	7.8 3.9	56	---	NONE	115	7.8	7.0	2016	65
209	WTR SOFT PUMP DRV MO	1.00	1735	3	220	1.6	NONE	NONE	45727	208	1.7	1.5	2016	47
209	BOILER #3 STOCK DRV	1.00	1735	3	208 220 440	3.6 3.4	182	CEIX	81218	208	3.6	2.1	2016	61
209	#2 STOCKER MOTOR	1.00	1735	3	208 220 440	3.6 3.4	182	CEIX	81158	208	3.6	1.9	2016	55
209	#1 STOCKER DRIVE MTR	1.00	1735	3	208 220 440	3.6 3.4	182	CEIX	81217	208	3.6	5.3	2016	89
209	DRAG MOTOR	1.50	1725	3	208 220 440	4.4 4.2	56	---	NONE	208	4.4	2.2	2016	64
209	COAL PIT SHAK CONVEY	2.00	1140	3	220 440	6.3 3.1	225	K	09822	208	6.6	5.0	2016	154
209	BOIL COAL FEED CONVEY	3.00	1750	3	208	14.0	254Y	---	45729	208	14.0	3.0	2016	87
209	BLOWER MOTOR	3.00	3475	3	208	9.1	145T	K	NONE	208	9.1	5.8	2016	168
209	BLOWER MOTOR #3	3.00	3475	3	208	9.1	145T	K	NONE	208	9.1	6.1	2016	177
209	ELEVATOR	5.00	1730	3	208	14.7	145T	K	NONE	208	9.1	6.2	2016	180
209	OVERFIRE BLOW MTR #3	5.00	1740	3	220 440	12.8 6.4	254	EK	12150	208	14.7	14.5	2016	421
209	FORCED BLOWER #2	5.00	1740	3	220 440	12.8 6.4	254	EK	69188	208	12.8	6.3	1000	95
209	WIND BOX FAN DRIVE	5.00	1750	3	220 440	13.6 6.8	254	EX	69190	208	13.5	8.7	2016	267
209	CHEM FEED PUMP MOTOR	---	---	---	---	---	---	---	69192	208	14.4	7.5	2016	230
221	AIR CONDITIONER EAST	---	---	---	---	---	---	---	64558	---	---	3.4	2016	---
221	AIR CONDITIONER WEST	---	---	---	---	---	---	---	NONE	---	---	9.9	200	---
231	SEWING MACHINE	---	1725	1	110	5.0	---	---	NONE	---	---	9.6	200	---
243	CONDENSER FAN	.33	---	3	208 440	2.3	---	---	97812	115	4.8	2.3	200	4
243	CONDENSER FAN	.33	---	3	208 440	2.3	---	---	269105A	208	2.3	---	300	10
243	CONDENSER FAN	.33	---	3	208 440	2.3	---	---	269105A	208	2.3	---	300	10
243	AIR HANDLER BLOWER	3.00	3460	3	208 220 440	7.6 3.8	F56	TDR-BH	89394	208	2.3	---	300	10
243	WATER COOLER	---	---	1	115	4.0	---	---	70833	115	4.0	6.0	300	33
243	COMPRESS MOTOR WEST	---	---	3	208 220	---	---	---	89394	208	---	3.6	300	2
243	COMPRESS MOTOR EAST	---	---	3	208 220	---	---	---	89394	208	---	---	300	---
247	CONDENSATE PUMP DRV	.75	3450	3	208 220 440	2.5 1.3	656	PFU3	NONE	208	2.5	1.9	200	5
247	STAT AIR COMPRESSOR	2.00	1800	3	220 440	6.0 3.0	255-4	SES	77457	208	6.4	5.4	300	28
247	PAINT BOOTH WTR PUMP	5.00	1740	3	200	15.0	184T	---	NONE	208	14.5	14.6	100	21
247	PORT AIR COMPRESSOR	---	1725	1	115 230	14.0 7.0	182	CDR-LE	090692	115	14.0	13.5	200	13
247	AIR CONDITIONER	---	---	---	---	---	---	---	NONE	---	---	10.3	200	31
247	WATER COOLER	---	---	1	115	4.0	---	---	87457	115	4.0	2.9	100	1
247	PAINT BOOTH EXHS FAN	10.00	1725	3	200	29.4	21ST	CJ4R	NONE	208	28.3	17.0	300	123
253	SUMP PUMP MOTOR	.33	---	1	115	---	---	---	NONE	115	---	7.5	100	3
253	PUMP MOTOR	2.00	1725	3	208	5.2 2.6	---	---	2382M	208	5.2	4.2	1200	73
262	ICE CRUSHER	.50	1725	1	115	6.8	J56	SPS	06558	115	6.8	---	100	3
302	CONDENSATE MOTOR	2.00	3460	3	200	6.0	---	---	NONE	208	6.0	3.0	700	29

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
302	CONDENSATE MOTOR	2.00	3460	3	200	6.0	---	---	NONE	208	6.0	5.3	700	52
302	SCHNEIBLE FAN	3.00	1755	3	200	10.6	---	---	NONE	208	10.6	9.0	1000	125
304	EAST CONDENSATE MTR	1.50	3450	3	200	4.5	---	SC	NONE	208	4.5	3.0	700	29
304	WEST CONDENSATE MTR	1.50	3450	3	200	4.4	---	SC	NONE	208	4.4	2.8	700	28
305	FUZE CUT-OFF	.33	1725	1	115	208	230	---	---	115	7.0	7.0	1000	32
305	CONDENSATE MOTOR	1.50	3450	3	200	208	---	SC	NONE	208	4.5	2.5	700	24
308	CORNER CHAIN DRV #1	.75	1725	3	230	460	---	P	---	460	1.3	.9	1500	43
308	POWDER CONV DRIVE	.75	1725	3	230	460	---	P	---	460	1.3	.9	1500	43
308	RETURN MOTOR	.75	1725	3	230	460	---	P	---	460	1.3	.9	1500	43
308	POWDER CONVEYOR	.75	1725	3	230	460	---	P	---	460	1.3	.9	1500	43
308	HYD PUMP MTR #1	5.00	1730	3	230	460	---	---	---	460	7.0	4.5	1500	33
311	LATHE-CUTTER	.75	1725	3	115	230	---	---	95643	208	5.3	5.0	1500	215
311	CONDENSATE MOTOR	.75	3450	3	230	---	---	---	96570	208	2.6	1.3	700	14
311	HYD MOTOR	5.00	1740	3	230	460	---	---	94092	208	13.0	6.0	150	29
311	LATHE-CHUCK	7.50	1725	3	220	440	---	K	95643	208	20.1	7.0	1500	320
311A	TEST COMPRESSION	1.00	1725	3	230	---	---	P	6635	208	4.4	2.3	1000	36
312	AIR HANDLER MOTOR	.75	1750	3	208	---	---	---	41152	208	2.5	2.2	1000	31
312	CONDENSATE PUMP	.75	3450	3	208	230	460	---	96565	208	2.6	1.8	700	21
314	FUEL OIL PUMP MOTOR	.33	1725	3	115	230	---	---	97270	208	3.5	2.1	1000	33
314	FUEL OIL PUMP MOTOR	.33	1725	3	115	230	---	---	97271	208	3.5	2.1	1000	33
314	MARATHON MTR PUMP #2	.75	1725	3	200	400	---	---	NONE	208	2.6	2.4	1000	80
314	MARATHON MTR PUMP #1	.75	1725	3	200	400	---	T	NONE	208	2.6	2.3	1000	31
314	OIL PUMP	3.00	3405	3	200	400	---	---	97270	208	11.4	10.1	1000	140
314	OIL PUMP	3.00	3405	3	200	400	---	---	97271	208	11.4	10.3	1000	142
314	BLOWER MOTOR	5.00	3460	3	200	---	---	---	97271	208	14.2	12.9	1000	178
314	BLOWER MOTOR	5.00	3460	3	200	---	---	---	97270	208	14.2	8.3	1000	114
314	PUMP MOTOR	10.00	1745	3	200	---	---	---	97273	208	29.9	15.0	1000	208
314	PUMP MOTOR	10.00	1745	3	200	---	---	---	97274	208	29.9	17.6	1000	244
315	#3 FEED-IN CONNOLLY	.33	1725	3	230	460	---	P	---	460	.8	.5	2000	31
315	#6 FEED-OUT CONNOLLY	.33	1725	3	230	460	---	P	---	460	.8	.5	2000	31
315	#3 FEED-OUT CONNOLLY	.33	1725	3	230	460	---	P	---	460	.6	.5	1000	16
315	CONV ASSY DISCHRG	.33	1725	3	230	460	---	---	---	460	.5	.5	1000	16
315	POWDER PRESS DISCHRG	.33	1725	3	230	460	---	---	---	460	7.5	.5	1000	19
315	CONV UNTRAY TO ASSY	.33	1725	3	230	460	---	---	---	460	.8	.5	2000	31
315	#5 FEED-IN CONNOLLY	.33	1725	3	230	460	---	P	---	460	.8	.5	2000	31
315	DRILL PRESS	.33	1725	3	208	220	---	---	79526	208	1.3	2.9	800	33
315	CONV - CONE HOPPER	.33	1725	3	230	460	---	---	---	460	.8	.8	1000	26
315	CONV MTR ULTRA CLEAN	.33	1725	3	230	460	---	---	---	460	.6	.6	2000	38
315	CONV CONE HOPPER	.33	1725	3	230	460	---	---	---	460	.6	.5	1000	16
315	#1 FEED-OUT CONNOLLY	.33	1725	3	230	460	---	P	---	460	.8	.5	2000	31
315	CONV UNTRAY TO ASSY	.33	1725	3	230	460	---	---	---	460	.8	.7	1000	23
315	#8 FEED-OUT CONNOLLY	.33	1725	3	230	460	---	P	---	460	.8	.5	2000	31
315	SYNTRON BOWL #1	.33	1725	3	230	460	---	---	---	460	.8	.7	1000	23
315	#9 FEED-OUT CONNOLLY	.33	1725	3	230	460	---	P	---	460	.8	.5	2000	31
315	ASSEMBLY DISCHARGE	.33	1725	3	230	460	---	---	---	460	.6	.5	1000	16
315	CONV DISASSY TO SWAG	.33	1725	3	230	460	---	---	---	460	.6	.6	1000	19
315	AIR COMPRESSOR	.33	1725	1	115	230	---	CS	NONE	115	5.2	5.4	800	20
315	POWDER PRESS #1	.33	1725	3	230	460	---	---	---	460	.5	.3	1000	10
315	CONV SYNTRON TO SWAG	.33	1725	3	230	460	---	---	---	460	.6	.6	1000	19
315	#8 FEED-IN CONNOLLY	.33	1725	3	230	460	---	P	---	460	.8	.5	2000	31
315	CONV FEED GAGE MACH	.33	1725	3	230	460	---	---	---	460	.8	.6	1000	19
315	#6 FEED-IN CONNOLLY	.33	1725	3	230	460	---	P	---	460	.8	.5	2000	31

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
315	DISCHARGE CONVEYOR	.33	1725	3	230 460	2.5	5	---	---	460	.5	.3	1000	10
315	BODY CONVEYOR #1	.33	1725	3	230 460	1.2	6	---	---	460	.6	.5	1000	16
315	#5 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.2	8	---	---	460	.8	.5	2000	31
315	TRAYING CONVEYOR	.33	1725	3	230 460	1.5	8	---	---	460	.8	.7	1000	23
315	CONV MTR TRAY TABLE	.33	1725	3	230 460	1.5	8	---	---	460	.8	.7	2000	45
315	CONVEYOR ULTRA ASSY	.33	1725	3	230 460	1.2	6	---	---	460	.6	.5	1000	16
315	#4 FEED-IN CONNOLLY	.33	1725	3	230 460	1.2	6	---	---	460	.6	.5	2000	31
315	#9 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5	8	---	---	460	.8	.5	2000	31
315	#10 FEED-OUT CONVEY	.33	1725	3	230 460	1.5	8	---	---	460	.8	.5	2000	45
315	POWDER CONV DRIVE	.33	1725	3	230 460	1.5	8	---	---	460	.8	.5	1000	16
315	#2 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.5	8	---	---	460	.8	.7	1000	23
315	DRV DISASSY TO SHAGE	.33	1725	3	230 460	1.5	8	---	---	460	.8	.7	2000	45
315	CONVEYOR DISCHARGE	.33	1725	3	230 460	1.5	6	---	---	460	.6	.6	1000	16
315	DRV SYNTRON TO SHAGE	.33	1725	3	030 460	1.5	6	---	---	460	.6	.5	1000	16
315	#10 FEED-IN CONVEYOR	.33	1725	3	230 460	1.5	8	---	---	460	.8	.6	2000	38
315	ULTRASONIC CONVEYOR	.33	1725	3	230 460	1.5	8	---	---	460	.8	.6	2000	38
315	#1 FEED-IN CONNOLLY	.33	1725	3	230 460	1.2	8	---	---	460	.8	.7	2000	45
315	CONV - CONE HOPPER	.33	1725	3	230 460	1.5	8	---	---	460	.8	.7	1000	23
315	#7 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5	8	---	---	460	.8	.5	2000	31
315	#7 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.5	8	---	---	460	.8	.9	2000	57
315	GAGING MACH FEED CON	.33	1725	3	230 460	1.5	8	---	---	460	.8	.7	1000	23
315	GAGING MACH FEEDING	.33	1725	3	230 460	1.5	8	---	---	460	.8	1.0	1000	31
315	CONV DRV FEED CLEAN	.33	1725	3	230 460	1.5	8	---	---	460	.8	.7	1000	23
315	#2 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5	6	---	---	460	.6	.5	2000	31
315	CONVEY SHAGE MACH #1	.33	1725	3	230 460	1.5	6	---	---	460	.6	.5	1000	16
315	AIR CONDITIONER FAN	.50	1075	3	230 460	3.2	1.6	---	---	460	1.6	1.7	700	38
315	AIR CONDITIONER FAN	.50	1075	3	460	2.2	---	---	---	460	2.2	2.0	700	45
315	AIR CONDITIONER FAN	.50	1075	3	230 460	3.2	1.6	---	---	460	1.6	2.0	700	45
315	AIR CONDITIONER FAN	.50	1075	3	460	2.2	---	---	---	460	2.2	2.1	700	47
315	#3 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.9	2000	57
315	W ED VARI-CROSS-OVER	.50	1725	3	208	4.0	---	---	---	208	4.0	3.2	2000	204
315	#5 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	DISASSEMBLY DRIVE	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	1000	23
315	#1 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.9	2000	57
315	#9 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	#4 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.9	2000	57
315	EXHAUST FAN	.50	1725	1	115 230	8.0	4.0	---	---	115	8.0	7.9	1000	36
315	#9 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	1.0	2000	64
315	ASSEMBLY MACHINE	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.6	1000	19
315	BODY UNTRAYING #1	.50	1725	3	230 440	2.2	1.1	---	---	440	1.1	.9	1000	29
315	#5 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.9	2000	57
315	#6 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	1.0	2000	64
315	E ED VARI-CROSS-OVER	.50	1725	3	230 460	2.0	1.0	---	---	208	2.0	1.1	2000	69
315	#8 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	MAIN ASSEMBLY #1	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	1000	23
315	GAGING MACHINE DRIVE	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	0.9	2000	57
315	ASSEMBLY DRIVE MOTOR	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	1.0	1000	31
315	TRAYING TABLE	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.9	1000	29
315	#1 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.9	2000	57
315	#3 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	#6 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	1.1	2000	71

DAY AND ZIMMERMAN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
315	#10 TAPE FIXTUR VARI	.50	1725	3	230 460	2.0	1.1	---	---	460	1.1	.7	2000	57
315	#7 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	GAGING DRIVE MOTOR	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	1000	23
315	CONVEYOR DRIVE #1	.50	1725	3	230 460	2.0	1.0	---	---	460	1.0	1.0	1000	31
315	#2 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	GAGING MACHINE DRIVE	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	1000	31
315	UNTRAY DRIVE MTR #3	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.9	1000	29
315	SHELL WALKER	.50	1725	3	208	4.0	---	---	---	208	4.0	2.6	2000	166
315	UNTRAYING MOTOR #2	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.9	1000	29
315	#10 FUZE GAGING VARI	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	57
315	#2 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	POWDER CONV DRV MTR	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	1.0	2000	64
315	#7 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	#4 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	SHELL WALKER	.50	1725	3	208	4.0	---	---	---	208	4.0	2.8	2000	178
315	DISASSEMBLY DRIVE #1	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	1000	23
315	#8 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	DRIVE MTR TRAY TABLE	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	1.0	2000	64
315	DISASSEMBLY DRIVE	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	1.1	1000	35
315	CORNER CHAIN BUCKET	.75	1725	3	230 460	2.5	1.3	---	---	460	1.3	.7	1500	33
315	POWDER CORNER CHAIN	.75	1725	3	230 460	2.5	1.3	---	---	460	1.3	.9	1500	43
315	CONV - IN FEED	.75	1725	3	230 460	2.5	1.3	---	---	460	1.3	1.0	1500	48
315	CORNER CHAIN BUCK RE	.75	1725	3	230 460	13.0	---	---	---	460	13.0	.9	1500	43
315	PORT GRINDER MW SHP	1.00	1725	1	115	---	---	---	---	115	---	8.7	1000	160
315	BANDING CONVEYOR MTR	1.00	1725	3	208	6.0	---	---	NONE	208	6.0	3.1	2000	197
315	COOLING TOWER MOTOR	1.00	1740	3	230 460	3.8	1.9	---	NONE	460	1.9	2.0	1000	37
315	N CIR PUMP/HEATER RM	1.50	1745	3	230 460	5.2	2.6	---	---	460	2.6	2.3	2000	147
315	SOUTH CONDENSATE MTR	1.50	3450	3	200	---	---	---	NONE	208	4.4	2.7	700	26
315	NORTH CONDENSATE MTR	1.50	3450	3	200	---	---	---	NONE	208	4.4	2.4	700	23
315	WEST END AIR CURTAIN	2.00	1150	3	208 220 440	8.2	7.8	3.9	---	208	8.2	7.0	500	54
315	WEST AIR CURTAIN MTR	2.00	1150	3	208 220 440	8.2	7.8	3.9	EN	96153	8.2	7.2	500	55
315	WEST AIR CURTAIN MTR	2.00	1150	3	208 220 440	8.2	7.8	3.9	EN	96154	8.2	6.9	500	52
315	WEST END AIR CURTAIN	2.00	1150	3	208 220 440	8.2	7.8	3.9	EN	96153	8.2	7.4	500	57
315	EAST AIR CURTAIN MTR	2.00	1165	3	230 460	6.6	3.3	---	---	460	3.3	6.1	500	48
315	AIR CURTAIN MOTOR	2.00	1165	3	230 460	6.6	3.3	---	---	460	3.3	6.0	500	48
315	#2 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4	3.7	---	---	460	3.7	3.1	2000	197
315	#5 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4	3.7	---	---	460	3.7	2.7	2000	171
315	#1 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4	3.7	---	---	460	3.7	2.3	2000	147
315	#7 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4	3.7	---	---	460	3.7	3.4	2000	217
315	#8 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4	3.7	---	---	460	3.7	3.5	2000	223
315	#3 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4	3.7	---	---	460	3.7	3.7	2000	236
315	#6 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4	3.7	---	---	460	3.7	3.0	2000	191
315	#9 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4	3.7	---	---	460	3.7	3.0	2000	191
315	#10 MAIN/VARI CONLY	2.00	1730	3	230 460	7.4	3.7	---	---	460	3.7	3.0	2000	223
315	#4 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4	3.7	---	---	460	3.7	3.5	2000	215
315	CIRCULATING PUMP	3.00	3450	3	230 460	8.4	4.2	---	---	460	4.2	4.5	1500	215
315	HYD PUMP MOTOR	5.00	1725	3	230 460	13.0	6.5	---	---	460	6.5	---	2000	---
315	#7 HYD PUMP CONNOLLY	5.00	1730	3	230 460	14.0	7.0	---	---	460	7.0	4.9	2000	312
315	#1 HYD MOTOR CONLY	5.00	1730	3	230 460	14.0	7.0	---	---	460	7.0	4.8	2000	307
315	UNLOAD HYD PUMP #1	5.00	1730	3	230 460	14.0	7.0	---	---	460	7.0	4.4	1500	210
315	UNIT #4 W END CONVEY	5.00	1730	3	230 460	13.5	6.5	---	NONE	460	6.5	3.2	2000	204
315	#5 HYD MTR CONNOLLY	5.00	1730	3	230 460	14.0	7.0	---	---	460	7.0	4.1	2000	262

DAY AND ZIMMERMANN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67337
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
315	HYDRAULIC PUMP	5.00	1730	3	230 460	14.0	7.0	---	---	460	7.0	4.1	1500	196
315	#9 HYD PUMP CONNOLLY	5.00	1730	3	230 460	14.0	7.0	---	---	460	7.0	4.1	2000	262
315	#6 HYD PUMP CONNOLLY	5.00	1730	3	230 460	14.0	7.0	---	---	460	7.0	4.0	2000	255
315	#3 HYD PUMP CONNOLLY	5.00	1730	3	230 460	14.0	7.0	---	---	460	7.0	4.6	2000	293
315	UNLOAD HYD PUMP #2	5.00	1730	3	230 460	14.0	7.0	---	---	460	7.0	4.7	1500	225
315	#2 HYD PUMP CONNOLLY	5.00	1730	3	230 460	14.0	7.0	---	---	460	7.0	4.7	2000	300
315	UNIT #3 W END CONVEY	5.00	1730	3	230 460	13.8	6.5	---	NONE	460	6.5	5.0	2000	319
315	#8 HYD MTR CONNOLLY	5.00	1730	3	230 460	14.0	7.0	---	---	460	7.0	5.0	2000	31
315	#10 HYD PUMP MOTOR	5.00	1730	3	230 460	14.0	7.0	---	---	460	7.0	5.0	2000	319
315	#4 HYD PUMP CONNOLLY	5.00	1730	3	230 460	14.0	7.0	---	---	460	7.0	5.3	2000	238
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.5	6.5	---	94514	460	6.5	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0	6.5	---	94088	460	6.5	3.6	2000	229
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0	6.5	---	94096	460	6.5	3.8	2000	248
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0	6.5	---	94091	460	6.5	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0	6.5	---	94090	460	6.5	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0	6.5	---	94089	460	6.5	3.6	2000	229
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0	6.5	---	94095	460	6.5	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0	6.5	---	94518	460	6.5	3.8	2000	242
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.5	6.5	---	94093	460	6.5	2.8	2000	178
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.5	6.5	---	94098	460	6.5	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.5	6.5	---	94513	460	6.5	3.2	2000	204
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0	6.5	---	94515	460	6.5	3.2	2000	204
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0	6.5	---	94094	460	6.5	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0	6.5	---	94516	460	6.5	4.2	2000	268
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0	6.5	---	94099	460	6.5	2.8	2000	178
315	EXHAUST FAN #5	5.00	1745	3	230 460	14.6	7.3	---	78277	460	7.3	4.5	1000	144
315	EXHAUST FAN #2	5.00	1745	3	230 460	14.6	7.3	---	88136	460	7.3	5.4	1000	171
315	#6 EXHAUST FAN	5.00	1745	3	230 460	14.6	7.3	---	88138	460	7.3	5.4	1000	171
315	#7 EXHAUST FAN	5.00	1745	3	230 460	14.6	7.3	---	78282	460	7.3	4.8	1000	152
315	EXHAUST FAN #3	5.00	1745	3	230 460	14.6	7.3	---	78380	460	7.3	4.5	1000	144
315	EXHAUST FAN #1	5.00	1745	3	230 460	14.6	7.3	---	78365	460	7.3	5.5	1000	175
315	EXHAUST FAN #4	5.00	1745	3	230 460	14.6	7.3	---	88137	460	7.3	4.8	1000	152
315	VACUUM UNIT #1	5.00	3500	3	230 460	13.8	6.9	---	95144	460	6.9	4.6	500	73
315	VACUUM UNIT #3	5.00	3500	3	230 460	13.8	6.9	---	95142	480	6.9	4.6	2000	283
315	VACUUM UNIT #4	5.00	3500	3	230 480	13.8	6.9	---	95146	480	6.9	4.9	500	78
315	VACUUM UNIT #5	5.00	3500	3	230 460	13.8	6.9	---	95145	460	6.9	4.8	2000	307
315	VACUUM UNIT #7	5.00	3500	3	230 460	13.8	6.9	---	95150	460	6.9	4.8	2000	307
315	VACUUM UNIT 3 FROM/E	5.00	3500	3	230 460	13.8	6.9	---	95148	460	6.9	6.0	2000	191
315	EAST VACUUM UNIT	5.00	3500	3	230 460	13.8	6.9	---	95147	460	6.9	6.2	2000	197
315	VACUUM UNIT (WEST)	5.00	3500	3	230 460	13.8	6.9	---	95143	460	6.9	6.0	2000	383
315	HYD PUMP	10.00	1175	3	230 460	26.6	13.3	---	---	208	26.6	26.0	2000	1658
315	HYD PUMP MOTOR	10.00	1750	3	230 460	26.0	13.5	---	NONE	460	13.0	8.6	2000	547
315	HYD PUMP MOTOR	10.00	1755	3	230 460	27.0	13.5	---	96103	460	13.5	9.2	2000	587
315	HYD PUMP MOTOR	10.00	1755	3	230 460	27.0	13.5	---	96100	460	13.5	9.0	2000	575
315	HYD PUMP MOTOR	10.00	1755	3	230 460	27.0	13.5	---	96101	460	13.5	9.1	2000	580
315	HYD PUMP MOTOR	10.00	1755	3	230 460	27.0	13.5	---	96102	460	13.5	9.2	2000	587
315	HYD PUMP MOTOR	10.00	1755	3	230 460	27.0	13.5	---	96099	460	13.5	9.0	2000	573
315	RELINANCE MOTOR	125.0	885	3	230 460	310.1	155.1	---	98376	460	155.0	172.0	1500	4112
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230 460	40.0	20.0	---	---	460	20.0	16.9	1000	539
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230 460	40.0	20.0	---	---	460	20.0	16.0	1000	509
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230 460	40.0	20.0	---	---	460	20.0	14.9	1000	475
315	HYD PUM CON SWAGE #1	15.00	1765	3	230 460	40.0	20.0	---	---	460	20.0	11.8	1000	376

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
315	HYD PUMP MOTOR	15.00	1765	3	230 460	40.0 20.0	---	---	94685	460	20.0	15.0	2000	956
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230 460	40.0 20.0	---	---	---	460	20.0	11.6	1000	389
315	HYD PUMP/PEL PRES #1	15.00	1765	3	230 460	40.0 20.0	---	P	---	460	20.0	19.0	1000	606
324	CONVEYOR LEAD CUP #2	.33	1725	3	230 460	1.4 .7	---	---	---	208	1.4	1.3	1500	62
324	CONVEYOR LEAD CUP #3	.33	1725	3	230 460	1.5 .8	---	---	---	208	1.5	.9	1500	29
324	GRINDER	.33	3450	1	115	5.3	---	---	90590	115	5.3	4.5	100	2
324	TRAYING LEAD CUP #3	.50	1725	3	230 460	2.2 1.1	---	---	---	208	2.2	1.2	1500	57
324	CONVEYOR LEAD CUP #2	.50	1725	3	208 460	2.1 1.0	---	---	---	208	2.1	.9	1500	29
324	TRAYING LEAD CUP #2	.50	1725	3	230 460	2.2 1.1	---	---	---	208	2.2	1.5	500	71
324	LEAD PRES LEAD CUP 2	.50	1725	3	230 460	2.1 1.0	---	---	---	208	2.1	1.1	1500	35
324	CONVEYOR LEAD CUP #3	.50	1725	3	230 460	2.2 1.1	---	---	---	208	2.2	1.3	1500	62
324	LEAD PRES #3	.50	1725	3	230 460	2.2 1.1	---	---	---	208	2.2	1.0	1500	31
324	GRINDER	.50	3450	1	115	5.0	---	---	87488	115	5.0	5.0	100	2
324	GRINDER	.50	3450	3	208	2.0	---	---	90535	208	2.0	1.9	500	14
324	CONDENSATE PUMP	.75	3450	3	230 460	2.6 1.3	---	---	---	208	2.6	9 1.8	700	40
324	DRILL PRESS	1.00	1130	3	220 440	3.4 1.7	---	---	77008	208	3.4	2.0	500	16
324	AIR COMP FOR DELUGE	1.00	1725	3	208 440	4.0 1.9	---	---	---	208	4.0	1 4.0	300	38
324	BAND SAW	1.00	1725	3	220 440	3.2 1.6	---	---	65277	208	3.2	1.7	500	28
324	LATHE	1.50	1735	3	208	5.2	---	TFR83	94055	208	5.2	4.7	100	7
324	MILLING MACHINE	1.50	1800	3	208 220 440	4.6 4.4 2.2	---	C000	96747	208	4.6	2.8	800	28
324	AIR CONDITION BLOWER	2.00	1720	3	200 400	7.1 3.6	---	---	---	208	7.1	6.3	700	140
324	HACK SAW	3.00	1725	3	220 440	8.5 4.2	---	K	96387	208	8.5	3.8	500	116
324	VACUUM UNIT HRD TEST	5.00	3500	3	230 460	13.8 6.9	---	K	95149	460	6.9	6.1	2000	388
324	LATHE	7.50	1735	3	220 440	20.1 10.0	---	---	96884	208	20.1	6.7	150	31
324	LATHE	10.00	---	3	480	5.5	---	---	97194	480	5.5	5.0	900	149
325	#2 CONDENSER FAN	.33	---	3	208 240	2.1	---	---	89393	208	2.1	1.9	500	14
325	#1 CONDENSER FAN	.33	---	3	208 240	2.1	---	---	89393	208	2.1	2.5	500	17
325	CONDENSATE MOTOR	.75	3450	3	208 230 460	2.6 1.3	---	---	96562	208	2.6	2.0	700	21
325	AIR HANDLER	1.50	1725	3	220	---	---	---	NONE	208	---	3.8	1000	57
325	AIR CONDITIONER COMP	---	---	3	208 240	37.3	---	---	89393	208	37.3	27.0	500	194
325	AIR CONDITIONER	---	---	3	---	---	---	---	89393	---	---	4.5	700	29
328	COOLING TOWER FAN	1.00	1730	3	230 460	3.8 1.9	---	---	---	460	1.9	2.2	1000	35
328	BELL & GOSSETT PUMP	2.00	1735	3	208 230 460	6.3 6.0 3.0	---	---	NONE	460	3.0	3.0	1500	144
328	BLOCAIR COMPRESSOR	150.0	885	3	230 460	384. 192.	---	---	98375	460	192.0	180.0	1500	8605
505	SUMP PUMP MOTOR	.33	1725	1	115	8.0	---	---	SP 006	115	8.0	7.9	100	4
513	SUMP PUMP	.33	1725	1	115	10.0	---	---	---	115	10.0	8.6	100	4
701	EAST AIR COMPRESSOR	.50	1725	1	115 230	10.0 5.0	---	---	---	115	10.0	9.2	6000	254
701	WEST AIR COMPRESSOR	2.00	1725	3	230 460	6.2 3.1	---	L	97818	308	6.2	4.9	2016	142
701	TABLETING PRESS #6	3.00	1150	3	208 220 440	9.2 8.8 4.4	---	P	85990	208	9.2	4.3	1300	81
701	TABLETING PRESS #4	3.00	1150	3	208 220 440	9.2 8.8 4.4	---	P	---	208	9.2	3.6	700	86
701	S. CONDENSATE PUMP	---	---	---	---	---	---	---	---	---	---	2.7	4028	90
701	NO. CONDENSATE PUMP	---	---	---	---	---	---	---	---	---	---	2.5	4028	84
703	AIR HANDLER	.50	1735	3	208	1.6	---	---	73497	208	1.6	1.2	5014	87
703	AIR COMPRESSOR	1.00	1740	3	220 440	3.8 1.9	---	---	69358	208	3.8	3.6	5014	260
705	CONDENSATE MOTOR	.75	3450	3	208 230 460	2.6 1.3	---	---	96569	208	2.6	1.6	4028	94
705	AIR HANDLER MOTOR	3.00	1725	3	230 460	13.2 6.6	---	---	93116	460	6.6	5.7	5014	911
705	AIR COMPRESSOR	5.00	1725	3	230 460	14.5 7.3	---	L	97820	208	14.5	13.8	4028	795
705	AC COMPRESSOR	---	---	3	460	4.6	---	---	93127	460	4.6	3.4	5014	544
705	AC COMPRESSOR	---	---	3	460	50.0	---	---	---	---	50.0	43.0	5014	6871
708	AIR HANDLER MOTOR	.50	1750	3	208 416	1.6	---	---	70003	208	1.6	.9	5014	66
708	AIR COMPRESSOR MOTOR	1.00	1740	3	220 440	3.8 1.9	---	---	69354	208	3.8	3.6	5014	275
711	CONDENSATE MOTOR	.75	3450	3	208 230 460	2.8 2.6 1.3	---	---	97904	208	2.8	1.6	4028	94

DAY AND ZIMMERMANN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

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712	SHAKER MOTOR	.50	1735	3	208 220	1.2	.4	---	71022	208	.4	---	500	---
715A	BAND SAW	.50	1725	3	230 460	1.6	.8	---	91059	208	1.6	1.0	360	5
715A	ROCKWELL DRILL PRESS	.50	1725	3	230 460	1.6	.8	---	89694	208	1.6	1.1	246	3
715A	TOOL POLISH MOTOR #3	.50	1800	3	208 416	2.3	1.2	---	---	208	2.3	1.5	492	10
715A	TOOL POLISH MOTOR #1	.75	3450	3	208 220 440	5.0	2.5	---	---	208	2.5	1.2	492	9
715A	GRINDER	.75	3450	1	115 230	8.2	4.1	---	---	208	8.2	5.3	738	31
715A	MILLING MACHINE	1.00	1800	3	220 440	3.2	1.6	---	92760	115	1.6	1.7	246	5
715A	TOOL POLISH MOTOR #2	1.50	1710	3	230 460	4.8	2.4	---	090970	208	4.8	2.0	492	14
715A	ROCKWELL LATHE	1.50	1735	3	200	5.2	---	---	94054	208	5.2	3.8	492	26
715A	LATHE	3.00	1160	3	220 440	9.4	4.2	---	96655	208	9.4	5.9	492	42
715B	BAND SAW	.50	1725	1	115	8.2	---	---	---	115	8.2	7.4	200	7
715B	RADIAL ARM SAW	2.00	3425	3	208 240 480	5.0	2.5	---	89242	208	5.0	2.0	300	9
715B	RIDGID PIPE VICE	---	---	1	115	---	---	---	97937	115	---	8.1	615	23
715E	GRINDER	.50	3450	1	115	5.6	---	---	79204	115	5.6	2.6	600	7
715E	RIDGID PIPE VICE	---	---	1	115	---	---	---	---	115	---	9.9	1476	67
715H	CONVEYOR MOTOR	.50	1725	3	208 220 440	1.9	1.9	1.0	87402	208	1.9	1.0	384	5
715H	EXHAUST FAN	1.00	1720	3	220 440	3.2	1.6	---	76183	208	3.2	2.3	1968	66
715I	VACUUM PUMP MOTOR	---	---	3	---	---	---	---	---	---	---	3.2	2016	52
716	AC COND. FAN NORTH	7.50	---	3	440	10.5	---	---	---	440	10.5	7.7	2016	473
716	AC COND SOUTH UNIT	7.50	---	3	440	10.5	---	---	---	440	10.5	8.2	2016	504
716	AC COND FAN NORTH	---	---	3	440	132	---	---	---	440	132.0	93.0	2016	5716
716	AC COMP SOUTH UNIT	---	---	3	440	132	---	---	---	440	132.0	80.9	2016	4971
716E	JONES LOADER #9	2.00	1745	3	208	6.8	---	---	89312	208	6.8	5.6	1700	137
716E	JONES LOADER #8	2.00	1745	3	208	6.8	---	---	89311	208	6.8	6.4	1700	158
716F	JONES LOADER #6	2.00	1745	3	208	6.8	---	---	88951	208	6.8	5.7	500	42
716F	JONES LOADER #7	2.00	1745	3	208	6.8	---	---	88952	208	6.8	6.0	500	43
716H	JONES LOADER #10	2.00	1745	3	208	6.8	---	---	89310	208	6.8	5.9	1700	144
716H	JONES LOADER #14	2.00	1745	3	208	6.8	---	---	89635	208	6.8	6.6	1700	161
717	SHAKE MOTOR	1.00	1725	1	115 230	13.8	6.9	---	6121	115	13.8	9.0	200	15
717	CONDENSATE MOTOR	1.00	3450	3	230 460	3.2	1.6	---	96082	460	1.6	1.5	1000	48
717	AIR COMPRESSOR	5.00	1725	3	230 460	14.5	7.3	---	97815	208	14.5	11.5	2016	334
717	CONDENSER FAN	7.50	1755	3	460	10.5	---	---	---	460	10.5	13.0	2016	835
717	A.C. COMPRESSOR	---	---	3	460	132	---	---	---	460	132.0	70.6	2016	4536
717	AIR HANDLER	10.00	1755	3	230 460	25.2	12.6	---	---	460	12.6	8.9	2016	258
722	CONVEYOR MOTOR	.50	1725	3	208	1.9	---	---	62008	208	1.9	.9	2016	26
722	EXHAUST FAN	.50	1725	1	115 230	3.9	1.8	---	92067	115	3.9	6.0	2016	56
722	CONVEYOR MOTOR	.50	1725	3	220	1.3	---	---	48228	208	1.3	.9	2016	26
722	CONDENSATE MOTOR	.75	3450	3	208 230 460	2.8	2.6	1.3	---	208	2.8	1.7	2016	109
722	AIR HANDLER	1.00	1740	3	208	3.3	---	---	41107	208	3.3	2.2	2016	64
722	EXHAUST FAN	5.00	1150	3	230 440	14.2	7.1	---	4860A	208	14.2	5.1	2016	149
722	AIR COMPRESSOR	5.00	1725	3	230 460	14.5	7.3	---	97821	208	14.5	8.7	2016	559
722	VACUUM MOTOR	5.00	3600	3	220	15.8	---	---	95856	208	15.8	14.1	1000	203
724	OIL PUMP MOTOR #1	.75	1725	3	208 220 440	2.8	2.7	1.4	---	208	2.8	3.0	1968	85
724	OIL PUMP MOTOR #2	.75	1725	3	208 220 440	2.8	2.7	1.4	---	208	2.8	2.3	1968	69
724	AIR COMPRESSOR MOTOR	5.00	1725	3	200	16.6	---	---	---	200	16.6	17.6	1968	480
724	STACK FAN #1	7.50	1725	3	220 440	20.6	10.3	---	60590	208	20.6	11.0	1968	331
724	STACK FAN #2	7.50	1750	3	208	20.6	---	---	0104800	208	20.6	9.1	1968	258
724	STACK FAN #3	7.50	1750	3	208	20.6	---	---	0120860	208	20.6	9.0	1968	255
724	BURNER MTR #3 BOILER	7.50	1800	3	200	22.4	---	---	---	208	22.4	10.6	1968	289
724	BURNER MTR #1 BOILER	7.50	1800	3	200	22.4	---	---	---	208	22.4	11.1	1968	303
724	BURNER MTR #2 BOILER	7.50	1800	3	200	22.4	---	---	---	208	22.4	10.9	1968	298
724	WATERFEED PUMP #1	15.00	3515	1	200	42.7	---	---	---	208	42.7	43.8	1968	1195

DAY AND ZIMMERMANN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
724	WATERFEED PUMP #2	15.00	3515	3	200	42.7	B			208	42.7	46.4	1968	1266
724	WATERFEED PUMP #3	15.00	3515	3	200	42.7	B			208	42.7	46.2	1968	1259
726	CONDENSATE MOTOR	.75	3450	3	208	220 440	1.3	PFU3		208	2.5	1.8	1968	50
726	AIR HANDLER MOTOR	3.00	1750	3	208	220 440	8.9	JS	41128	208	8.9	5.7	1968	161
730	AIR HANDLER MOTOR	.75	1725	3	208	220 440	1.4	P	85874	208	2.8	1.7	416	10
730	AIR COMPRESSOR MOTOR	1.00	1740	3	220 440	3.8 1.9			69350	208	3.8	3.3	2016	102
732	CONDENSER FAN MOTOR	.33		3	208 240	2.3				208	2.3	1.6	5014	116
732	AIR HANDLER	1.00	1730	3	208 240 440	3.2 1.6		K		208	3.2	1.6	5014	116
732	AC COMPRESSOR MOTOR			3	208 240	18.2				208	18.2	14.4	5014	1041
733	AIR COMPRESSOR MOTOR	.33	1725	1	115 230	5.4 2.7			93700	115	5.4	6.8	5014	157
733	CONDENSATE MOTOR	.75	3450	3	208 230 460	2.8 2.6	1.3		97901	208	2.8	1.7	5014	123
733	AIR HANDLER MOTOR	1.00	1725	3	230 460	3.4 1.7				208	3.4	2.3	5014	116
736	AIR HANDLER MOTOR	.50	1735	3	208	1.6			74203	208	1.6	1.1	104	2
736	AIR COMPRESSOR MOTOR	1.00	1740	3	220 440	3.8 1.9			69351	208	3.8	4.2	5014	670
739	AIR HANDLER	.50	1735	3	208	1.6			73650	208	1.6	1.0	5014	73
739	AIR COMPRESSOR	2.00	1725	3	200 400	7.1 3.6			91269	115	7.8	2.8	5014	117
740	EXHAUST FAN	.50	1725	1	115 230	7.8 3.9				115	10.6	9.2	4028	170
741	COMPRESSOR	.75	1725	1	115 230	10.6 5.3	1.3	KFU3		208	2.8	2.0	4028	116
741	CONDENSATE MOTOR	.75	3450	3	208 230 460	2.8 2.6	1.3		98280	208	2.8	5.3	4028	308
741	CONDENSER FAN MOTOR	1.00		3	208	5.8			93704	208	5.8	5.1	4028	296
741	CONDENSER FAN MOTOR	1.00		3	208	5.8			93704	208	5.8	5.1	4028	296
741	CONDENSER FAN MOTOR	1.00		3	208	5.8			93704	208	5.8	5.1	4028	296
741	CONDENSER FAN MOTOR	1.00		3	208	5.8			93704	208	5.8	5.1	4028	296
741	AIR HANDLER	3.00	1735	3	200	9.7		TDR-8E		208	9.7	8.0	4028	447
741	COMPRESSOR MOTOR			3	208	106.			93704	208	106.0	82.6	4028	4794
744	BOX FAN	1.50	1740	3	230 460	4.8 2.4		L		460	2.4	1.7	984	24
744	W COOLING TOWER FAN	5.00	1735	3	460	5.0 2.2		CJ5NB		460	2.2	1.8	500	29
744	E COOLING TOWER FAN	5.00	1735	3	460	6.6 2.8		K		460	2.8	2.2	1500	106
744	SCHRAMM COMPRESS #1	100.0	1770	3	230 460	240. 120.				460	120.0	157.5	1000	5019
744	SCHRAMM COMPRESS #4	100.0	1770	3	230 460	240. 120.				460	120.0	165.4	1000	5270
744	COMPRESSOR MOTOR	100.0	1770	3	230 460	240. 120.				460	120.0	124.0	492	1945
744	SCHRAMM COMPRESS #3	100.0	1770	3	230 460	240. 120.				460	120.0	147.7	1000	4708
744	WATER PUMP MOTOR	15.00	3500	3	230 460	38.0 19.0				460	19.0	12.4	2016	360
744	GARD DENVER COMPRESS	200.0	1180	3	460	238.		K		460	238.0	198.0	1000	6310
744	COMPRESSOR MOTOR	200.0	1180	3	460	238.		K	88424	460	238.0	203.0	984	6237
744	ELECTRA COMPRESSOR	400.0	1775	3	440	460.		K	97961	440	460.0	397.0	2016	24397
808	BOILER OIL FEEDER	.33	1725	3	115 208 230	6.0 3.0	56C		68754	115	6.0	7.0	300	17
809	BLOWER MOTOR	3.00	1750	3	220	8.4	225	RP-1		208	8.4	3.5	300	16
809	CONDENSATE PUMP			3	208 416				41105				100	
812	SUMP PUMP			1								8.3	100	
816	SUMP PUMP			1								8.3	100	
902	CHEMICAL FEED PUMP	.33	1725	1	115 230	6.6 3.3			NONE	115	6.6	7.4	2016	69
902	WATER PUMP NORTH	.75	1725	3	208 220 440	2.8 2.7	1.4	PF	NONE	208	2.8	3.1	2016	85
902	WATER PUMP SOUTH	.75	1725	3	208 220 440	2.8 2.7	1.4	PF	NONE	208	2.8	2.3	2016	68
902	AIR COMPRESSOR	5.00	1725	3	200	16.6		A	NONE	208	16.6	17.4	750	180
902	STACK FAN MOTOR #3	5.00	1750	3	208	14.4		OS	02262	208	14.4	7.7	1000	
902	#3 BURNER MOTOR	7.50	1800	3	200	22.4		COSO	NONE	208	22.4	11.5	1000	166
902	WATER FEED PUMP	15.00	3515	3	208	42.7				208	42.7	43.5	1000	627
904	BANDING CUTTER	.33	1800	1	115 230	4.6 2.3			90540	115	4.6	4.1	200	4
904	CONDENSATE PUMP	.75	3450	3	208 230 460	2.6 1.3			96560	208	2.6	1.5	500	10
904	PAINT BOOTH CONVEYOR	2.00	1800	3	208 416	6.4 3.2		SE	45764	208	6.4	4.1	1000	59
904	VACUUM UNIT	5.00	3460	3	208	13.9		CE4B	90934	208	13.9	11.1	500	46

DAY AND ZIMMERMAN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
904	PAINT BOOTH WTR PUMP	5.00	3500	3	208	13.8	9402	SSHH	60179	208	13.8	5.0	1000	199
904	PAINT BOOTH EXHAUST	---	---	---	---	---	---	---	---	---	---	---	---	---
904	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	---	---	---
904	AIR COMPRESSOR	25.00	1160	3	220	61.2	405	CS	02499	440	30.6	7.5	100	1399
905	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	---	---	---
907	SUMP PUMP IN MANHOLE	---	---	---	---	---	---	---	---	---	---	---	---	---
909	CONDENSATE PUMP	.75	1750	3	220	2.6	RSS72	QZ	NONE	208	2.6	8.2	100	---
909	HEATER BLOWER	1.00	1725	3	220	3.3	204	E15	68824	208	3.3	1.1	200	3
909	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	---	---	10
910	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	---	---	---
913	DEHUMIDIFIER	---	---	---	---	---	---	---	---	---	---	---	---	---
913	SUMP PUMP	---	---	---	---	---	---	---	96182	---	---	---	---	---
913	SUMP PUMP EAST DOCK	---	---	---	---	---	---	---	---	---	---	---	---	---
913	DEHUMIDIFIER	---	---	---	---	---	---	---	---	---	---	---	---	---
915	SUMP PUMP	---	---	---	---	---	---	---	96181	---	---	---	---	---
920	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	---	---	---
951	CONVEYOR DRIVE MOTOR	.33	1725	3	220	1.4	2P	FS	26930	208	1.4	1.3	100	2
951	PORTABLE COOLING FAN	.33	1725	3	208	2.8	---	---	64540	208	2.8	4.7	100	7
951	CIRCULATING PUMP MTR	.50	1725	3	208	1.4	35	TA	69316	208	1.4	1.5	100	2
951	SUMP PIT PUMP X-RAY	.50	1725	3	208	1.7	7240W	RA	SP 130	208	1.7	1.1	100	12
951	CONDENSATE PUMP	.75	3450	3	208	2.5	C56	P	NONE	208	2.5	2.3	200	7
951	RING CONVEYOR MOTOR	3.00	1160	3	208	9.3	254	ES	42086	208	9.3	7.1	200	21
951	COOLING UNIT FAN	---	---	---	---	---	---	---	76143	---	---	---	---	---
951	FILM PROCESSOR #2	---	---	---	---	---	---	---	NONE	---	---	---	---	---
951	SYNCHRONOUS CENTER	10.00	3600	3	220	82.4	326	SK	78632	208	82.4	10.6	200	97

APPENDIX B

ACTIVE MOTORS SORTED BY LOCATION AND BY HORSEPOWER RATING AT EACH LOCATION
BUILDING NUMBERS ABOVE 1000

DAY AND ZIMMERMANN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1003	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	7.8	100	---
1005	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	8.6	100	---
1006	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	4.2	100	---
1008	PUMP MOTOR (TANK)	.50	1725	1	115 230	7.8 3.9	56	P	PM0724	115	7.8	6.3	500	14
1008	PUMP MOTOR	3.00	3505	3	208	10.1	182T	---	PM0771	208	10.1	7.5	500	54
1008	PIT PUMP #2	7.50	3450	3	208	23.0	213TP	LU	PM0725	208	23.0	19.8	500	142
1008	PIT PUMP #1	7.50	3450	3	208	23.0	213TP	LU	PM0726	208	23.0	16.7	500	120
1011	SUMP PUMP	.50	---	1	---	---	---	---	---	---	---	11.1	200	---
1011	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	8.0	100	---
1011	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	6.8	100	---
1017	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	9.2	100	---
1019	SUMP PUMP IN X-RAY	---	---	---	---	---	---	---	---	---	---	15.8	1200	---
1019	SUMP PUMP-MEN'S ROOM	---	---	---	---	---	---	---	---	---	---	6.7	1200	---
1019	DEHUMIDIFIER	---	---	---	---	---	---	---	---	---	---	8.4	100	---
1065	DEHUMIDIFIER	---	---	---	---	---	---	---	---	---	---	8.1	100	---
1102	SUMP PUMP MOTOR	.33	---	1	115	---	---	---	NONE	---	---	2.0	2016	59
1104	SUMP PUMP	.50	1725	3	208 440	2.0 1.0	D56	PF	---	208	2.0	1.3	2016	38
1105	OIL PUMP MOTOR #2	.50	1725	3	208 440	1.8 .9	D56	PF	---	208	1.8	5.5	2016	154
1105	OIL PUMP MOTOR #1	2.00	3460	3	200	6.9	R145T	COG4B	---	208	6.9	21.8	2016	610
1105	TRANSFER PUMP MOTOR	7.50	1745	3	200 400	23.4 11.7	213T	DP	---	208	23.4	22.0	2016	615
1105	WATER FEED PUMP #2	7.50	1745	3	200 400	23.4 11.7	213T	DP	---	208	23.4	25.3	2016	707
1105	WATER FEED PUMP #1	10.00	3465	3	200	27.5	215TD	TFS BDZ	---	208	27.5	8.2	100	4
1105	BURNER MOTOR #1	10.00	3465	3	200	27.5	215TD	TFS BDZ	---	208	27.5	1.9	200	5
1105	BURNER MOTOR #2	10.00	3465	3	200	27.5	215TD	TFS BDZ	---	208	27.5	3.7	2016	107
1107	SUMP PUMP	.33	1725	1	115	8.0	---	---	NONE	115	8.0	6.5	100	3
1107	CONDENSATE MOTOR	.50	1735	3	208	1.7 1.6	A-6B	K	78913	208	4.6	6.5	100	3
1107	AIR HANDLER DRIVE	1.00	1720	3	208 220	8.0 3.4	203	---	41290	208	115	8.0	100	3
1109	SUMP PUMP	.33	1720	1	115	8.0	---	---	NONE	115	8.0	6.5	100	3
1109	SUMP PUMP	.75	1725	3	---	5.3	L56C	P	---	---	---	3.4	1000	---
1109	#1 DIS COOL TUN CONV	.75	1725	3	208	5.3	L56G	P	87316	208	5.3	4.3	1000	62
1109	#4 POUR CONV DRIVE	1.00	1725	3	208	6.0	L56C	P	88003	208	6.0	4.6	1000	66
1109	#1 POUR CONV DRIVE	1.00	1725	3	208	6.0	56C	P	---	208	6.0	5.4	1000	78
1109	CONVEYOR DRIVE MOTOR	1.00	1725	3	208	4.3	143T	---	---	208	4.3	5.1	1000	73
1109	NO. PRE-HEAT BLOWER	1.00	1745	3	200	4.3	143T	GE4B	---	208	4.3	5.5	1000	80
1109	SO. PRE-HEAT BLOWER	1.00	1755	3	208	4.0	182	AE1X	---	208	4.0	3.9	1000	55
1109	NO. PRE-HEAT CONVEY	1.00	1755	3	208	4.0	182	AE1X	---	208	4.0	3.9	1000	55
1109	SO. PRE-HEAT CONVEY	1.00	1755	3	208	4.0	184T	K	95860	208	15.8	15.9	300	69
1109	VACUUM UNIT	5.00	3500	3	208	15.8	---	---	---	208	15.8	6.3	100	3
1111	SUMP PUMP ELEVAT PIT	.33	---	1	115	10.0	---	---	---	115	10.0	8.1	100	4
1111	SUMP PUMP N.E CORNER	.33	---	1	115	10.0	---	---	---	115	10.0	5.6	100	3
1122	SUMP PUMP	.33	---	1	115	10.0	---	---	---	115	10.0	8.3	100	---
1127	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	4.5	1000	64
1139	AIR HANDLER DRIVE	1.50	1730	3	220 440	5.0 2.5	184	---	NONE	208	5.0	9.9	1500	---
1140	DEHUMIDIFIER	---	---	---	---	---	---	---	93820	---	---	8.6	100	---
1202	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	5.1	100	---
1205	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	10.7	360	18
1402	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96238	115	6.6	5.0	360	3
1402	DELUGE COMPRESSOR SO	.50	1725	1	115 230	8.4 4.2	48	---	96238	115	8.4	11.4	360	19
1403	DELUGE COMPRESSOR SO	.33	1725	1	115	6.6	48	---	96236	115	6.6	5.4	360	9
1403	DELUGE COMPRESSOR NO	.50	1725	1	115 230	8.4 4.2	48	---	96236	115	8.4	4.7	360	8
1404	DELUGE COMPRESSOR	.50	1725	1	115 230	8.4 4.2	48	---	NONE	115	8.4	11.0	360	18
1405	DELUGE COMPRESSOR SO	.33	1725	1	115	6.6	48	---	96235	115	6.6	12.7	360	21
1405	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96234	115	6.6	12.7	360	21

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1406	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96233	115	6.6	11.6	360	19
1406	DELUGE COMPRESSOR SO	.50	1725	1	115	8.4	48	---	96233	115	8.4	5.8	360	10
1407	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96239	115	6.6	8.1	360	13
1407	DELUGE COMPRESSOR SO	.50	1725	1	115	8.4	48	---	96239	115	8.4	3.4	360	6
1408	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96223	115	6.6	8.7	360	14
1408	DELUGE COMPRESSOR SO	.50	1725	1	115	8.4	48	---	96223	115	8.4	4.9	360	8
1409	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96222	115	6.6	11.3	360	19
1409	DELUGE COMPRESSOR SO	.50	1725	1	115	8.4	48	---	96222	115	8.4	5.1	360	8
1410	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96237	115	6.6	11.3	360	19
1410	DELUGE COMPRESSOR SO	.50	1725	1	115	8.4	48	---	96237	115	8.4	5.7	360	9
1411	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96229	115	6.6	11.0	360	18
1411	DELUGE COMPRESSOR SO	.50	1725	1	115	8.4	48	---	96229	115	8.4	6.1	360	10
1412	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96228	115	6.6	11.1	360	18
1412	DELUGE COMPRESSOR SO	.50	1725	1	115	8.4	48	---	96228	115	8.4	5.9	360	10
1413	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96231	115	6.6	11.3	360	19
1413	DELUGE COMPRESSOR SO	.75	1725	1	115	12.0	56	---	96240	115	12.0	9.0	360	15
1414	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96241	115	6.6	11.1	360	18
1414	DELUGE COMPRESSOR SO	.75	1725	1	115	12.0	56	---	96241	115	12.0	17.4	360	24
1415	DELUGE COMPRESSOR NO	.50	1725	1	115	8.4	48	---	96242	115	8.4	5.7	360	9
1415	DELUGE COMPRESSOR SO	.75	1725	1	115	12.0	56	---	96242	115	12.0	8.2	360	14
1416	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96220	115	6.6	11.4	360	19
1416	DELUGE COMPRESSOR SO	.50	1725	1	115	8.4	48	---	96220	115	8.4	5.4	360	9
1417	DELUGE COMPRESSOR NO	.50	1725	1	115	8.4	48	---	96235	115	8.4	5.5	360	9
1417	DELUGE COMPRESSOR SO	.50	1725	1	115	8.4	48	---	96235	115	8.4	10.1	360	17
1418	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96224	115	6.6	11.0	360	18
1418	DELUGE COMPRESSOR SO	.50	1725	1	115	8.4	48	---	96224	115	8.4	4.4	360	7
1419	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96226	115	6.6	10.7	360	18
1419	DELUGE COMPRESSOR SO	.50	1725	1	115	8.4	48	---	96226	115	8.4	6.3	360	10
1420	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96227	115	6.6	11.5	360	19
1420	DELUGE COMPRESSOR SO	.50	1725	1	115	8.4	48	---	96227	115	8.4	5.5	360	9
2001	FURNACE BLOWER	.50	1725	1	115	7.4	48	---	NONE	115	7.4	3.6	1000	17
2002	AIR COMPRESSOR	1.50	1725	1	115	17.0	P145T	CP	93818	115	17.0	7.5	1500	52
2105-A	PUMP MOTOR	2.00	1740	3	220	5.6	---	---	40989	208	5.6	---	500	---
2105-A	PUMP MOTOR	75.00	1800	3	220	180.0	505-4	SC	40988	208	180.0	---	500	---
2106	MIXER	.33	1725	1	115	6.2	---	---	---	115	6.2	6.1	1000	28
2106	SUMP PUMP	.33	1725	1	115	10.0	---	---	---	115	10.0	8.3	100	4
2106	BURNER MOTOR	.33	1725	1	115	6.0	56C	---	NONE	115	6.0	8.9	2016	83
2106	EXHAUST FAN	.50	1725	1	115	7.8	---	---	---	115	7.8	7.5	500	17
2106	CAST SLOW MIXER	.75	1725	3	208	3.2	---	---	78181	208	3.2	1.6	1000	23
2106	CAST SLOW MIX MOTOR	.75	1800	3	208	3.0	---	---	093508	208	3.0	1.5	1500	73
2106	AUXILIARY PUMP MOTOR	2.00	1740	3	220	8.9	---	---	93507	440	8.9	1.6	1500	12
2106	RAPID MIX	3.00	---	3	230	10.0	---	---	41067	440	10.0	2.7	150	171
2106	HEATER FAN MOTOR	---	1725	1	115	2.9	F182TC	SC	NONE	460	2.9	3.6	1500	18
2106	TANK STIR	---	---	---	---	---	---	---	96451	115	---	2.4	1000	---
2106	WASH PUMP MOTOR	50.00	1170	3	220	126.0	504	KF	96066	440	126.0	45.0	1500	2058
2106	WASH PUMP MOTOR	50.00	1170	3	220	126.0	504	KF	41063	440	126.0	55.0	1500	2515
2106	#2 PUMP MOTOR	75.00	1775	3	230	190.0	365T	---	41064	460	190.0	75.0	1500	3585
2106	#1 PUMP MOTOR	75.00	1775	3	230	190.0	365T	COG46	0429	460	190.0	80.6	1500	3854
2106-A	LOW LIFT PUMP MOTOR	20.00	1755	3	230	52.0	256TP12	K	0428	460	52.0	21.0	1500	1005
2106-A	RIVER WATER PUMP	20.00	1755	3	230	52.0	256TP12	K	NONE	460	52.0	21.0	1500	1005
2202-1	SUMP PUMP	.33	1725	1	115	10.0	---	---	90161	460	10.0	8.2	100	4
2202-1	COMMUNICATOR MOTOR	.50	1725	3	208	2.6	P56	P	NONE	115	2.6	2.0	750	21

DAY AND ZIMMERMAN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
2202-1	PUMP MOTOR #1	7.50	1750	3	208 220 440	21.2 20.0 10.0	CJ4B	213T	96157	208	21.2	20.0	1000	288
2202-1	PUMP MOTOR #2	7.50	1750	3	208 220 440	21.2 20.0 10.0	CJ4B	213T	96156	208	21.2	20.0	1000	283
2202-2	SUMP PUMP	.33	1725	1	115 ---	10.0 ---	---	---	NONE	115	10.0	7.9	100	4
2202-2	COMMUNICATOR MOTOR	.50	1725	3	208 ---	2.6 ---	P56	P	94084	208	2.6	2.0	750	21
2202-2	PUMP MOTOR #2	7.50	1750	3	208 220 440	21.2 20.0 10.0	213T	CJ4B	NONE	208	21.2	16.0	500	116
2202-2	SEWAGE PUMP MOTOR	10.00	1740	3	208 220 440	30.8 29.0 14.8	256U	---	NONE	208	30.8	29.0	500	210
2202-3	SUMP PUMP	.33	1725	1	115 ---	10.0 ---	---	---	NONE	115	10.0	8.2	100	4
2202-3	COMMUNICATOR MOTOR	.75	1140	3	208 ---	3.2 ---	P56	P	94085	208	3.2	2.1	750	23
2202-3	ROOF TOP EXHST BLOW	1.00	3450	3	208 ---	2.8 1.4	121B	---	68076	208	2.8	2.6	500	19
2202-3	CENTER PUMP MOTOR #2	15.00	1740	3	220 440 ---	41.0 20.5	326	KG	45252	208	41.0	37.0	500	267
2202-3	PUMP MOTOR #1	15.00	1750	3	208 220 440	42.0 40.0 20.0	254T	---	NONE	208	42.0	36.0	500	260
2202-3	PUMP MOTOR #3	25.00	1180	3	208 220 440	78.0 74.0 37.0	324T	CJ4B	NONE	208	78.0	72.0	500	520
2203	EXHST BLOWER ON ROOF	.33	1750	3	208 ---	2.0 ---	---	---	69278	208	2.0	1.2	500	9
2203	EXHAUST BLOWER	.33	1750	3	208 ---	2.0 ---	WF	---	NONE	208	2.0	1.4	500	10
2203	BOILER FAN EXHAUST	.50	1725	3	208 220 440	1.7 .8	66	FS	74156	208	1.7	1.0	500	47
2203	GEAR REDUCING PUMP	.50	1775	3	230 460 ---	3.0 1.5	143T	---	40996	---	---	---	500	---
2203	AGITATOR MOTOR	.75	1750	3	230 460 ---	2.9 1.5	143T	---	NONE	208	2.9	2.2	500	16
2203	SLUDGE PUMP	2.00	1140	3	208 ---	7.8 ---	213-22	LGH	NONE	208	7.8	7.5	500	54
2203	PUMP MOTOR	5.00	870	3	208 ---	17.5 ---	254TC	TGS-BCV	NONE	208	17.5	14.6	500	106
3005	SUBMER SUMP PUMP NW	.33	---	1	110 ---	9.0 ---	---	---	NONE	---	---	8.4	100	---
3005	SUBMER SUMP PUMP SE	.33	---	1	110 ---	9.0 ---	---	---	NONE	---	---	8.6	100	---
3012	SUB SUMP PUMP	.33	---	1	115 ---	8.0 ---	---	---	NONE	115	8.0	8.6	100	4
3015	SUB SUMP PUMP OUT SO	.33	---	1	115 ---	---	---	---	NONE	115	---	8.8	100	4
3015	SUB SUMP PUMP OUT NO	.33	---	1	115 ---	---	---	---	NONE	115	---	8.6	100	4
3015	SUMP PUMP	.33	---	1	115 ---	---	---	---	NONE	115	---	8.6	100	4
3016	SUMP PUMP	.33	---	1	110 ---	---	---	---	NONE	115	---	7.5	100	3
3016	SUMP PUMP	.33	---	1	110 ---	---	---	---	NONE	115	---	8.3	100	4
3017	WATER SUMP PUMP MTR	3.00	3600	3	460 ---	4.0 ---	184P	JU	NONE	---	---	---	100	---
3017	WATER SUMP PUMP MTR	3.00	3600	3	460 ---	4.0 ---	184P	JU	NONE	---	---	---	100	---

APPENDIX C

INACTIVE MOTORS SORTED BY LOCATION AND BY HORSEPOWER RATING AT EACH LOCATION
BUILDING NUMBERS BELOW 999

DAY AND ZIMMERMAN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
102	EXHAUST FAN	.75	1750	1	115 230	10.4 5.2	C66		70968	115	10.4			
102	EXHAUST FAN	.75	1750	1	115 230	10.4 5.2	C66		70966	115	10.4			
102	EXHAUST FAN	.75	1750	1	115 230	10.4 5.2	C66		70970	115	10.4			
102	EXHAUST FAN	.75	1750	1	115 230	10.4 5.2	C66		70976	115	10.4			
202	AIR CONDITIONER								89902					
203	VACUUM PUMP MOTOR	.50	1725	3	220 440	1.6 0.8	P804B	284	NONE	208	1.7			
203	OIL PUMP DRIVE MOTOR	.50	1725	3	220 440	2.0 1.0	456	SC	85878	208	2.1			
203	AIR COND, COMP MOTOR	2.00		1	230	12.8			81036	230	12.8			
209	ANTI-SMOG BLOWER #3	7.50	1750	3	208	22.6	213-P	RGZ	NONE	208	22.6	33.1*		
209	ANTI-SMOG FAN #2	7.50	1750	3	208	22.6	213-P	RGZ	NONE	208	22.6	32.2*		
209	ANTI-SMOG FAN #1	7.50	1750	3	208	22.6	213-P	RGZ	NONE	208	22.6	37.5*		
210	FUEL OIL PUMP HOUSE	7.50	1160	3	208	21.2	324		05678	208	21.2	13.7*		
210	FUEL OIL PUMP HOUSE	7.50	1160	3	208	21.2	324		05677	208	21.2	14.6*		
221	DRILL PRESS MOTOR	.50	1725	1	115 230	7.6 3.9			46102	115	7.6			
221	COAL GRINDER	5.00	1150	3	220 440	14.6 7.5	NA-284	QZX	04725	208	15.5			
243	BURNER MOTOR	.33	1750	1	110 230	5.2 2.6		RIP	40882	115	5.0			
243	PUMP DRIVE MOTOR	.50	1725	3	208 220 440	2.6 1.3	H56	SC	88420	208	2.6			
243	AIR HANDLER	.50	1725	3	220 440	1.6 0.8	66Y	TP	087090	208	1.7			
302	WASH-COLLECTOR	1.00	1725	3	208 220	3.6 3.4			NONE	208	3.6	2.5*		26
305	BLENDER	1.00	1725	3	200	4.7			94590	208	4.7			
305	SCREENER	2.00	1750	3	208	7.5			95155	208	7.5			
305	SCHNEIBLE FAN	3.00	1755	3	200	10.6			NONE	208	10.6			
305	ELEVATOR DRIVE	7.50	1730	3	200	26.0			NONE	208	26.0			
306	TAPE FIX CONVEY SO.	.50	1725	3	230 460	2.0 1.0		P		208	2.0	23.5*		2
306	UNLOADING TABLE MTR	.50	1725	3	230 440	2.2 1.1		P		208	2.2	1.2*		3
306	TRAYING MOTOR	.50	1725	3	230 440	2.2 1.0		P		208	2.2	1.7*		3
306	GRENADE FEED WHEEL	.50	1725	3	220 440	4.4 2.2		P		208	4.4	1.0*		5
306	TAPE FIX CONVEY MID.	.75	1725	3	230 440	5.3		P		208	5.3	3.7*		5
306	TAPE FIX CONVEY NO.	.75	1725	3	208	5.3		P		208	5.3	5.7*		9
306	MAIN DRIVE MOTOR	5.00	1160	3	200	17.9				208	17.9	10.0*		
311	NORTH LATHE	7.50	1750	3	220 440	18.4 9.2			85079	208	18.4	7.0*		90
312	AIR CONDITIONER								78831					
315	S CIR PUMP/HEATER RM	1.50	1745	3	230 460	5.2 2.6				460	2.6			
316	EXHAUST FAN	.50	1750	3	208	2.0	H1356	IS	45621	208	2.0			
324	EXHAUST FAN BATT SHP	5.00	1745	3	208 220 440	15.0 14.0 7.2				208	15.0			
505	CONDENSATE PUMP MTR	.50	1130	3	220 440	2.1 1.0	163	E18	74292	208	2.2			
505	BLENDER MOTOR	1.50	1150	3	208	5.3			02351					
505	PELLET CHERRY BURREL	1.50	1730	3	220 440	4.6 2.3	124		85740					
505	#5 CUBICLE MOTOR	3.00	1160	3	208	8.6			19716					
505	#4 CUBICLE MOTOR	5.00	1150	3	220 440	14.2 7.1	284	K	70902					
505	#3 CUBICLE MOTOR	5.00	1730	3	208	14.7	254	K	12148					
505	#1 CUBICLE STOKES	5.00	1730	3	208	14.7	254	K	12149					
505	VACUUM MOTOR	5.00	3475	3	220 440	13.0 6.5	233	VES	76352					
505	VACUUM UNIT DRIVE	5.00	3475	3	208	13.8	225	JES	26492					
505	PRESS CHERRY BURREL	7.50	1760	3	208 220 440	21.2 10.6	2540	K	90342					
507	SUMP PUMP	.33	1725	1	115				NONE					
507	DRIVE MOTOR	.33	1725	3	208 220	2.1			75994					
507	DRILL PRESS DRIVE	.50	1130	3	208	2.4	163	E15	NONE					
507	WEST MARKING MACHINE	.50	1725	3	208	2.5	56C		NONE					
507	MARKING MACHINE	.50	1725	3	208	2.5	56C		NONE					
507	CONDENSATE PUMP	.50	1730	3	208 220	2.1	XV6		69300					
507	CONVEYOR DRIVE MOTOR	1.00	1720	3	220 440	3.1 1.5	203	K	55506					

* Active motors but annual hours of operation are not known.

DAY AND ZIMMERMAN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
507	BLISS MACHINE MOTOR	1.00	1725	3	208	3.3	203	PA	68568	---	---	---	---	---
507	BLISS PRESS MOTOR	1.00	1725	3	208	3.1	204	K	24695	---	---	---	---	---
507	CONVEYOR DRIVE MOTOR	3.00	1750	3	208	8.9	---	HP1	21031	---	---	---	---	---
509	AUX WATER PUMP MOTOR	.50	1735	3	208	1.6	NONE	NONE	00048	---	---	---	---	---
509	OIL PUMP MOTOR	.75	1725	3	208	2.4	NONE	K	45503	---	---	---	---	---
509	BOILER MOTOR	3.00	3450	3	208	8.8	224-Y	CS	45574	---	---	---	---	---
509	#1 BOILER MOTOR	3.00	3450	3	208	8.8	224-Y	CS	45575	---	---	---	---	---
509	#1 STACK FAN MOTOR	5.00	1750	3	208	14.4	254	OS	02346	---	---	---	---	---
509	#2 STACK FAN MOTOR	5.00	1750	3	208	14.4	254	OS	02347	---	---	---	---	---
511	CONDENSATE MOTOR	.50	1725	3	220	1.7	---	---	45576	---	---	---	---	---
511	EXHAUST BLOWER MOTOR	.50	3450	1	115	7.8	56	---	81169	---	---	---	---	---
511	BLOWER DRIVE MOTOR	1.50	1730	3	220	6.2	204	K	80418	---	---	---	---	---
513	STENCIL MACHINE	.33	1725	3	208	1.2	---	---	70583	---	---	---	---	---
513	DRILL PRESS DRIVE	.50	1140	3	208	1.9	J3D	K	77038	---	---	---	---	---
513	CONDENSATE PUMP	.50	1720	3	220	16.0	---	---	41164	---	---	---	---	---
513	CONVEYOR DRIVE MOTOR	.50	1725	3	208	1.6	7418RC	PA	67370	---	---	---	---	---
513	CONVEYOR DRIVE MOTOR	.75	1425	3	208	2.6	L-56	P	85064	---	---	---	---	---
513	CONVEYOR MOTOR	.75	1725	3	208	2.4	7420 WRC	PA	76694	---	---	---	---	---
513	NO. TO SO. CONVEYOR	1.00	1130	3	220	3.8	---	---	44117	---	---	---	---	---
513	CONVEYOR TAPING MACH	1.00	1725	3	208	3.1	204	K	26949	---	---	---	---	---
513	CONVEYOR DRIVE MOTOR	3.00	1725	3	---	2.4	7420	PA	76693	---	---	---	---	---
513	VACUUM PUMP MOTOR	5.00	1735	3	220	14.0	215	USE	88572	---	---	---	---	---
513	VACUUM UNIT MOTOR	5.00	3475	3	220	13.0	225	JES	60267	---	---	---	---	---
513	VACUUM MOTOR	5.00	3475	3	220	13.0	225	JES	45626	---	---	---	---	---
513	#2 PRESS MOTOR	7.50	1150	3	220	21.2	324	AP ZZ	75959	---	---	---	---	---
513	#1 PRESS MOTOR	7.50	1150	3	220	23.4	224	AP ZTT	75958	---	---	---	---	---
515	EXHAUST FAN DRIVE	.33	1140	3	220	11.0	A-66	---	NONE	---	---	---	---	---
515	7" WHEEL BENCH GRIND	.50	3450	1	115	5.0	---	---	68114	---	---	---	---	---
515	SPARE MOTOR	.50	3450	1	115	5.8	B-56Y	KN	91060	---	---	---	---	---
515	HEATER FAN MOTOR	.75	1125	3	220	2.8	204	K	70006	---	---	---	---	---
515	ELEC WAX HEAT POT	---	1140	1	115	4.2	---	FH	NONE	---	---	---	---	---
515	COMPRESSOR MOTOR	100.0	1185	3	440	16.0	---	5YL15WS	77559	---	---	---	---	---
515	COMPRESSOR MOTOR	75.00	1180	3	220	118.	580C	---	76090	---	---	---	---	---
712	GRINDER COOLANT PUMP	.50	1725	3	208	1.7	607	CS	02203	---	---	---	---	---
715A	HYDRA GRINDER	2.00	1140	3	220	1.7	---	MP	17657	208	1.7	---	---	---
715A	SPINDLE GRINDER	3.00	1725	3	220	7.2	---	L	27838	208	1.7	8*	---	---
807	AIR COMPRESSOR	.50	1725	3	208	9.0	---	---	27838	208	7.2	4.6*	---	---
807	CONDENSATE PUMP	.75	1735	3	208	1.6	2D1-8.6	---	02202	208	9.0	4.5*	---	---
807	BLOWER DRIVE	2.00	1750	3	208	2.6	A66	---	69230	---	---	---	---	---
807	AIR DRYER	3.00	1750	3	208	6.7	225	---	10691	---	---	---	---	---
809	SPEED SEALER	.33	1725	1	115	6.3	56	---	79494	---	---	---	---	---
809	CROSS CONVEYOR	.33	1725	3	208	1.2	5825W	PA	45602	---	---	---	---	---
809	HEAT SEALER	.33	1725	1	115	6.4	F56	---	90953	---	---	---	---	---
809	CONDENSATE PUMP	.50	1735	3	208	1.6	---	---	41105	---	---	---	---	---
809	CONVEYOR DRIVE	.75	1725	3	208	2.5	---	---	68503	---	---	---	---	---
809	GRINDER	1.00	1700	-	220	9.2	---	W20896	26469	---	---	---	---	---
809	VOLUMETRIC	1.00	1720	-	220	3.1	203	K	65507	---	---	---	---	---
809	VOLUMETRIC	1.00	1725	3	208	3.3	203	PA	68570	---	---	---	---	---
809	BACKOUT CONVEYOR	1.00	1725	-	220	3.4	---	K	79495	---	---	---	---	---
809	VOLUMETRIC	1.00	1730	-	220	3.6	182Y	GKKF	90919	---	---	---	---	---

* Active motors less annual hours of operation are not known.

DAY AND ZIMMERMAN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
809	#3 HEAD TO BODY	2.00	1735	3	208	6.2	225	K	67178	---	---	---	---	---
809	#2 HEAD TO BODY	2.00	1750	3	208	5.8	225	---	---	---	---	---	---	---
809	#1 HEAD TO BODY	2.00	1750	3	208	6.0	225	---	14470	---	---	---	---	---
809	BLOWER FAN	3.00	1750	-	220 440	8.4 4.2	225	---	77359	---	---	---	---	---
809	BLOWER FAN	3.00	1750	-	220 440	8.4 4.2	225	---	77359	---	---	---	---	---
812	EXHAUST BLOWER	.33	1140	3	208	1.1	---	---	70939	---	---	---	---	---
812	EXHAUST FAN	.33	1140	3	208	1.6	---	---	71066	---	---	---	---	---
812	SUMP PUMP	.33	1725	1	115	10.0	---	---	---	---	---	---	---	---
812	EXHAUST BLOWER	.50	1140	3	208	2.0	75V	HP	11916	---	---	---	---	---
812	AIR COMPRESSOR	.50	1725	3	208	2.0	---	---	74288	---	---	---	---	---
812	CONDENSATE PUMP	.50	1725	3	115 220	3.9 1.6	H8G	---	46106	---	---	---	---	---
812	CONVEYOR	.50	1725	3	208	1.9	---	---	21330	---	---	---	---	---
812	EXHAUST FAN	.50	3450	3	208	1.5	---	---	66562	---	---	---	---	---
812	CONVEYOR	.75	1725	3	208	3.2	---	---	---	---	---	---	---	---
812	BLOWER	.75	1725	-	220 440	2.6 1.3	75U	HP	69974	---	---	---	---	---
812	COND. PUMP	.75	1725	3	208	2.4	---	K	69371	---	---	---	---	---
812	PUMP DRIVE	.75	3500	-	220 440	2.6 1.3	PLW66K	---	69975	---	---	---	---	---
812	AIR CONDITIONER PUMP	1.00	1720	-	220 440	3.2 1.6	203	K	69967	---	---	---	---	---
812	CONVEYOR	1.00	1720	-	220 440	3.4 1.6	203	---	65529	---	---	---	---	---
812	CONVEYOR	1.00	1720	-	208	3.3	---	---	24693	---	---	---	---	---
812	BLOWER	1.00	1750	-	220 440	2.8 1.4	203	---	66358	---	---	---	---	---
812	CONVEYOR	1.00	1750	-	220 440	3.2 1.6	203Y	---	64048	---	---	---	---	---
812	#2 FOILING MACHINE	2.00	1155	3	208	6.6	225	---	79146	---	---	---	---	---
812	#3 FOILING MACHINE	2.00	1155	3	208	6.6	225	---	70930	---	---	---	---	---
812	#4 FOILING MACHINE	2.00	1155	3	208	6.6	225	---	70928	---	---	---	---	---
812	#1 FOILING MACHINE	2.00	1160	3	208	6.7	225	HPI	09796	---	---	---	---	---
812	#2 PRIMERHEAD	2.00	1720	-	220 440	5.6 2.8	225	CS	62819	---	---	---	---	---
812	#1 PRIMERHEAD	2.00	1720	-	220 440	5.6 2.8	225	CS	62818	---	---	---	---	---
812	BLOWER	5.00	1750	-	220 440	14.0 7.0	254	CSP	69971	---	---	---	---	---
812	BLOWER	7.50	1740	-	220 440	20.6 10.3	BA284	---	60589	---	---	---	---	---
812	VACUUM PUMP	7.50	1800	-	220 440	22.3 10.5	256V	E	90927	---	---	---	---	---
812	AIR COND COMPRESSOR	50.00	1765	3	208 416	126. 63.0	405S	K	78756	---	---	---	---	---
813	CHEMICAL MIXER	.50	1735	3	208	1.6	---	---	41087	---	---	---	---	---
813	OIL PUMP	.75	1725	3	208	2.4	J56	SO	90512	---	---	---	---	---
813	#1 BURNER	3.00	3450	3	208	8.8	224Y	CS	45792	---	---	---	---	---
813	#2 BURNER	3.00	3450	3	208	8.8	224Y	CS	45791	---	---	---	---	---
813	#1 STACK FAN	5.00	1740	3	208	13.6	254	---	41275	---	---	---	---	---
813	#2 STACK FAN	5.00	1740	3	208	14.4	---	---	01791	---	---	---	---	---
814	CONDENSATE PUMP	.50	1735	3	208	1.6	---	---	69373	---	---	---	---	---
814	HEATER BLOWER	1.50	1730	-	220 440	6.2 3.1	204	K	41141	---	---	---	---	---
816	SUMP PUMP	.33	1725	1	115	10.0	---	---	---	---	---	---	---	---
816	CONDENSATE PUMP	.75	1735	3	208	2.6	A66	---	69237	---	---	---	---	---
818	AIR COMPRESSOR	100.0	1175	3	440	120.	544	KF	62737	---	---	---	---	---
818	AIR COMPRESSOR	100.0	1175	3	440	120.	544	KF	62735	---	---	---	---	---
841	EXHAUST FAN	.50	1140	3	208	2.0	750	---	79497	---	---	---	---	---
841	BLOWER	.50	1140	3	208	2.0	---	---	79498	---	---	---	---	---
901	S. CONDENSATE PUMP	2.00	3500	1	115 230	22.0 11.0	192JM	CS	NONE	---	---	---	---	---
901	N. CONDENSATE PUMP	2.00	3500	1	115 230	22.0 11.0	182JM	CS	NONE	---	---	---	---	---
902	PORTABLE GEAR PUMP	3.00	1740	3	208 220 440	9.0 B.8 4.4	J5213	PF	NONE	---	---	---	---	---
902	FUEL OIL GEAR PUMP	3.00	1740	3	208 220 440	9.0 B.8 4.4	JF213	PF	NONE	---	---	---	---	---
902	STACK BLOWER FAN #2	5.00	1738	3	208	14.6	254	K	08512	---	---	---	---	---
902	#2 BURNER MOTOR	7.50	1800	3	200	22.4	AF0-1200	COSO	NONE	---	---	---	---	---

DAY AND ZIMMERMAN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
902	SPARE BOIL FEED PUMP	15.00	3470	3	200	40.5	215T	COG4B	NONE	---	---	---	---	---
902	WATER FEED PUMP	15.00	---	3	208	---	254T	---	NONE	---	---	---	---	---
904	VACUUM SWEEPER	.33	3450	1	115	2.8	56C	---	NONE	---	---	---	---	---
904	JOHNSON BAND SAW	.50	1725	1	115	5.0	F56	---	64298	---	---	---	---	---
904	CONVEYOR DRIVE MOTOR	.50	1725	3	208	4.0	F-66	---	090684	---	---	---	---	---
904	CONVEYOR VARI-DRIVE	.50	1730	3	208	7.8	145TO	P	---	---	---	---	---	---
904	VACUUM CLEANER MOTOR	.50	3450	1	115	208	D56C	KF	NONE	---	---	---	---	---
904	VENT BLOWER MOTOR	.50	3450	3	208	1.5	---	K	NONE	---	---	---	---	---
904	CONVEYOR GEARHEAD	.75	1725	3	220	4.0	7425	---	41226	---	---	---	---	---
904	OVEN FEED CONVEYOR	.75	1725	3	208	2.2	7420WPM	PA	41994	---	---	---	---	---
904	CONVEYOR DRIVE MOTOR	.75	1725	3	230	3.6	CR56W-217	PA	70882	---	---	---	---	---
904	COOLING FAN MOTOR	.75	3515	3	230	4.0	56	---	NONE	---	---	---	---	---
904	HEATER MOTOR	1.00	1140	1	115	2.2	7437	RA	NONE	---	---	---	---	---
904	HEATER MOTOR	1.00	1140	1	115	2.2	7437	RA	NONE	---	---	---	---	---
904	CONVEYOR DRIVE MOTOR	1.00	1740	3	230	3.6	H143T	PF	NONE	---	---	---	---	---
904	BOX CUTTER MOTOR	1.00	1740	3	230	3.6	H143T	PF	NONE	---	---	---	---	---
904	CONVEYOR DRIVE MOTOR	1.00	1740	3	230	3.6	H143T	PF	96447	---	---	---	---	---
904	BOX CUTTER MOTOR	1.00	1740	3	230	3.6	H143T	PF	NONE	---	---	---	---	---
904	CONVEYOR MOTOR #12	1.00	1740	3	230	3.6	H143T	PF	NONE	---	---	---	---	---
904	CONVEYOR DRIVE MOTOR	1.00	1740	3	230	3.6	H143T	PF	NONE	---	---	---	---	---
904	BOX CUTTER MOTOR #9	1.00	1740	3	230	3.6	H143T	PE	NONE	---	---	---	---	---
904	BOX CUTTER MOTOR #6	1.00	1740	3	230	3.6	H143T	PF	NONE	---	---	---	---	---
904	OVEN DISCHRG CONVEY	1.00	1800	3	230	3.6	H143T	PF	NONE	---	---	---	---	---
904	HYDRAULIC TABLE LIFT	1.00	3450	3	230	4.0	H42Y	BAB-EFG	NONE	---	---	---	---	---
904	EXHAUST FAN MOTOR	1.50	1710	3	230	4.0	145T	D	NONE	---	---	---	---	---
904	BLOWER DRIVE MOTOR	2.00	1750	3	208	5.8	225	08	75582	---	---	---	---	---
904	BLOWER DRIVE MOTOR	2.00	1750	3	208	5.8	225	05	75583	---	---	---	---	---
904	HYDRAULIC TABLE LIFT	2.00	1750	3	208	4.0	56Y2524M	---	NONE	---	---	---	---	---
904	N.E. END OVEN SYSTEM	3.00	1740	3	230	4.0	182T	CE48	NONE	---	---	---	---	---
904	VACUUM PUMP MOTOR	5.00	3475	3	220	13.0	225	JES	80760	---	---	---	---	---
904	CONVEYOR DRIVE	---	---	3	---	---	---	---	68489	---	---	---	---	---
904	HYDRAULIC PUMP MOTOR	15.00	1170	3	230	39.2	284T	RGZ	NONE	---	---	---	---	---
904	BALER MOTOR	20.00	1750	3	230	50.0	2561	---	NONE	---	---	---	---	---
904	AIR COMPRESSOR	25.00	1160	3	220	61.2	405	---	60186	---	---	---	---	---
905	HEATER MOTOR	.33	1725	3	---	1.2	33	PA	63847	---	---	---	---	---
905	HEATER MOTOR	.50	1750	3	---	2.0	163	IS	02394	---	---	---	---	---
905	CONVEYOR DRIVE MOTOR	.50	1800	3	---	2.8	6-56-5	VAVRFD	NONE	---	---	---	---	---
905	CONDENSATE PUMP	.75	1725	3	208	2.5	56	---	69240	---	---	---	---	---
905	PUMP MOTOR	1.00	1725	3	---	3.4	---	---	89874	---	---	---	---	---
905	COMPRESSOR MOTOR	1.50	1750	3	208	4.7	224	E1S	45546	---	---	---	---	---
905	WATER PUMP MOTOR	1.50	3450	3	---	5.3	M560	P	NONE	---	---	---	---	---
905	WATER PUMP MOTOR	1.50	3450	3	---	5.3	M560	P	NONE	---	---	---	---	---
905	ELEVATOR MOTOR	5.00	1000	3	208	18.0	284	AF	75536	---	---	---	---	---
905	ROTO CLONE MOTOR	5.00	1740	3	---	14.0	254	APZZ	65414	---	---	---	---	---
905	CONVEYOR DRIVE MOTOR	5.00	1740	3	208	15.0	184TC	P	NONE	---	---	---	---	---
905	ROTO CLONE BLOWER	5.00	1740	3	220	12.8	---	FK-25-4	79298	---	---	---	---	---
905	ROTO CLONE MOTOR	5.00	1740	3	---	14.0	254	APZZ	65413	---	---	---	---	---
905	ROTO CLONE MOTOR	5.00	1745	3	---	14.0	254	APZZ	65416	---	---	---	---	---
905	PORTABLE VACUUM PUMP	5.00	3475	3	220	13.0	225	JES	69489	---	---	---	---	---
905	KETTLE MOTOR	10.00	1160	3	220	26.2	---	JEX	12036	---	---	---	---	---
905	WEST KETTLE MOTOR	10.00	1170	3	208	32.0	256T	JEX	NONE	---	---	---	---	---
905	ROTO CLONE MOTOR	10.00	3500	3	208	30.0	284	JEX	60157	---	---	---	---	---

DAY AND ZIMMERMANN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
906	#1 RED WATER PUMP	5.00	1745	3	230 460	15.2	7.6	213/TP-10 K	847377	---	---	---	---	---
906	#2 RED WATER PUMP	5.00	1745	3	230 460	15.2	7.6	213/TP-10 K	847378	---	---	---	---	---
906	#3 RED WATER PUMP	5.00	1745	3	230 460	15.2	7.6	213/TP-10 K	761862	---	---	---	---	---
906	#4 RED WATER PUMP	5.00	1745	3	230 460	15.2	7.6	213/TP-10 K	761863	---	---	---	---	---
907	CONT. FEED PUMP	.50	1725	1	115 230	7.6	3.9	56	L47729	---	---	---	---	---
907	AIR COMPRESSOR DRIVE	1.00	1725	1	115 230	13.2	6.6	56	563664	---	---	---	---	---
907	HOIST DRIVE MOTOR	1.50	1760	3	208	4.9	---	132TDZ K	L927734	---	---	---	---	---
907	PRECOAT PUMP DRIVE	3.00	3505	3	208	10.1	---	182T P	L647841	---	---	---	---	---
907	#2 PUMP DRIVE - EAST	7.50	3450	3	208	23.0	---	213 TP LU	K946899	---	---	---	---	---
909	OSMEFAN	---	---	1	110	.6	---	---	NONE	---	---	---	---	---
909	OSMEFAN	---	---	1	110	.6	---	---	NONE	---	---	---	---	---
910	CONVEYOR MOTOR	.50	1725	3	220	1.9	---	63A K	25033	---	---	---	---	---
910	CENTER CONVEYOR	.50	1725	3	208	1.8	---	X66 HP	75328	---	---	---	---	---
910	BOX CAR CONVEYOR	.50	1725	3	220 440	1.6	.8	---	75332	---	---	---	---	---
910	CONVEYOR DRIVE MOTOR	.50	1725	3	220 440	1.6	.8	7418RW PA	75334	---	---	---	---	---
910	CONVEYOR MOTOR	.50	1725	3	208 220 440	1.6	.8	F66 PA	74119	---	---	---	---	---
910	CONVEYOR MOTOR	.50	1725	3	220 440	1.6	.8	7418RW PA	74120	---	---	---	---	---
910	CONVEYOR MOTOR	.50	1725	3	220 440	1.8	.9	X66 HP	75335	---	---	---	---	---
910	CONVEYOR DRIVE MOTOR	.75	1725	3	220 440	2.4	1.2	7420 PA	74124	---	---	---	---	---
910	CROSS CONVEYOR MOTOR	.75	1725	3	208 220 440	2.4	1.2	7420WPD PA	68867	---	---	---	---	---
910	CONVEYOR MOTOR	.75	1725	3	208 440	2.4	1.2	7420W PA	67190	---	---	---	---	---
910	CONVEYOR MOTOR	.75	1725	3	208	2.4	1.2	7420WRC PA	69770	---	---	---	---	---
910	UNIT CONVEYOR DRIVE	.75	1725	3	208	2.4	1.2	204 HP1	74682	---	---	---	---	---
910	CONVEYOR MOTOR	1.00	1150	3	220 440	3.6	1.8	13-224-4 VE-VESV	74773	---	---	---	---	---
910	SOUTH CONVEYOR	1.00	1170	3	208	6.0	2.4	L56C P	NONE	---	---	---	---	---
910	CONVEYOR DRIVE MOTOR	1.00	1725	3	208	6.0	2.4	L56C	---	---	---	---	---	---
910	CENTER CONVEYOR	1.00	1725	3	208 220 440	1.6	.8	7418RW PA	74142	---	---	---	---	---
910	STENCIL MACHINE	1.00	1725	1	115 230	4.0	2.0	H56C RA	74664	---	---	---	---	---
910	CONVEYOR DRIVE MOTOR	1.00	1725	3	208	4.3	---	L56C P	89385	---	---	---	---	---
910	STENCIL MACHINE	1.50	1725	3	220 440	4.2	2.1	---	76100	---	---	---	---	---
910	MAIN CONVEYOR MOTOR	3.00	1800	3	208 416	11.4	5.7	23-25-4-3 VEV-SEV	74712	---	---	---	---	---
910	WIRE TYING MACHINE	---	---	3	220 440	---	---	---	87401	---	---	---	---	---
913	BOX CONVEYOR DRIVE	.50	1725	3	200	2.7	---	L56 P	NONE	---	---	---	---	---
913	CONVEYOR	.50	1725	3	220 440	1.6	.8	7418RW PA	75330	---	---	---	---	---
913	LOWER BOX CONVEYOR	.50	1725	3	200	2.7	---	L56 P	NONE	---	---	---	---	---
913	CONVEYOR DRIVE	.50	1725	3	208	1.9	---	63A K	21332	---	---	---	---	---
913	OVERHEAD CONVEYOR	.50	1725	3	200	2.7	---	L56 P	NONE	---	---	---	---	---
913	WEST OVERHEAD CONVEYOR	.50	1725	3	200	2.7	---	L56 P	NONE	---	---	---	---	---
913	FIBER CASE CONVEYOR	.50	1725	3	208 220 440	1.6	.8	---	74117	---	---	---	---	---
913	CONVEYOR DRIVE MOTOR	.50	1725	3	220 440	1.6	.8	74118 PA	74118	---	---	---	---	---
913	CONVEYOR DRIVE MOTOR	.50	3450	1	115 230	7.0	3.5	56C	K318928	---	---	---	---	---
913	BLOWER MOTOR	.50	1725	3	208	2.7	---	203 PA	66145	---	---	---	---	---
913	GEARHEAD MOTOR	.75	1140	3	208	10.8	5.4	56	K670571	---	---	---	---	---
913	DIR-AIR PUMP MOTOR	.75	1725	1	115 230	10.8	5.4	56	K670593	---	---	---	---	---
913	CONVEYOR (LOWER)	.75	1725	1	115 230	10.8	5.4	56	NONE	---	---	---	---	---
913	CONVEYOR DRIVE	.75	1725	3	200	2.9	---	M56 P	NONE	---	---	---	---	---
913	CONVEYOR DRIVE MOTOR	.75	1725	3	208	5.3	---	L56C P	NONE	---	---	---	---	---
913	CONVEYOR (UPPER)	.75	1725	1	115 230	10.8	5.4	56	K670582	---	---	---	---	---
913	FIBER CONTAINER	.75	1725	3	208	5.3	---	L56C	NONE	---	---	---	---	---
913	BOX CONVEYOR MOTOR	.75	1730	3	220 440	2.4	1.2	NA003	74829	---	---	---	---	---
913	W. CONVEYOR DRIVE	.75	1800	3	220 440	2.5	1.2	204-4-10 SESVCD	79389	---	---	---	---	---
913	CONVEYOR DRIVE	1.00	1120	3	220 440	3.1	1.6	203 K	NONE	---	---	---	---	---
913	CONVEYOR MOTOR	1.00	1120	3	220 440	3.1	1.6	203 K	65532	---	---	---	---	---
913	FIBER CROSS CONVEYOR	1.00	1720	3	220 440	3.1	1.6	203	65530	---	---	---	---	---

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
913	CONVEYOR MOTOR	1.00	1725	3	208	6.0	L56C	P	NONE	---	---	---	---	---
913	CHAIN CONVEYOR MOTOR	1.00	1725	3	220	3.0	N203	RL	74874	---	---	---	---	---
913	CONDENSATE PUMP	1.00	1725	3	208	3.4	56	---	89680	---	---	---	---	---
913	CONVEYOR MOTOR	1.00	1725	3	220	3.0	203RW	PB	75333	---	---	---	---	---
913	CONVEYOR DRIVE MOTOR	1.00	1725	3	230	3.0	203RW	PB	74777	---	---	---	---	---
913	WAX CONVEYOR MOTOR	1.50	1730	3	208	7.5	145T0	P	NONE	---	---	---	---	---
913	CONVEYOR DRIVE MOTOR	1.50	1730	3	208	7.8	145T0	P	NONE	---	---	---	---	---
913	BOX TRANS CONVEYOR	1.50	1730	3	208	7.8	145TC	P	NONE	---	---	---	---	---
913	STENCIL MACHINE CONV	1.50	1730	3	200	6.5	145	P	NONE	---	---	---	---	---
913	CONVEYOR DRIVE MOTOR	2.00	1725	3	220	2.6	224RC	PB	74131	---	---	---	---	---
913	STENCIL MACHINE	2.00	1740	3	208	5.8	184	PFV3	NONE	---	---	---	---	---
913	WIRE TIE DRIVE MOTOR	3.00	1725	3	220	8.0	225	TGB-8E	114534	---	---	---	---	---
913	WIRE TIE DRIVE MOTOR	3.00	1765	3	220	9.6	225	EIRX	NONE	---	---	---	---	---
913	VARIABLE SPEED CONVY	3.00	1800	3	208	11.9	5.7	14-213-21	VEVEVGD	---	---	---	---	---
913	CONVEYOR DRIVE	5.00	1740	3	208	14.6	184T	P	NONE	---	---	---	---	---
913	CONVEYOR DRIVE MOTOR	5.00	1740	3	208	15.0	184T	P	NONE	---	---	---	---	---
913	CONVEYOR MOTOR	5.00	1800	3	208	18.4	23254-4-3	VEV-SEV	74714	---	---	---	---	---
913	CONVEYOR MOTOR	5.00	1800	3	208	18.4	23-254-4	VEV-SEV	74803	---	---	---	---	---
913	CONVEYOR DRIVE MOTOR	5.00	1800	3	208	18.4	23254-43C	VEV-SER	78575	---	---	---	---	---
913	VACUUM PUMP MOTOR	5.00	3475	3	220	13.0	225	JES	79488	---	---	---	---	---
913	VACUUM PUMP MOTOR	5.00	3475	3	220	13.0	225	JES	71585	---	---	---	---	---
913	CONVEYOR DRIVE MOTOR	7.50	1715	3	208	21.0	254U	K	NONE	---	---	---	---	---
913	CONVEYOR MOTOR	7.50	1755	3	208	21.0	254U	K	NONE	---	---	---	---	---
913	CONVEYOR MOTOR	7.50	1725	3	208	5.3	L56C	P	NONE	---	---	---	---	---
913	BOX CONVY TO STENCIL	---	1725	3	208	3.4	P56C	P	NONE	---	---	---	---	---
913	OVERHEAD CONVEYOR	---	1725	3	208	3.4	P56C	P	NONE	---	---	---	---	---
913	CONVEYOR MOTOR	---	1725	3	200	2.3	M48Y	P	NONE	---	---	---	---	---
913	CONVEYOR MOTOR	---	1725	3	208	3.4	P56C	P	NONE	---	---	---	---	---
915	GRINDER MOTOR	.50	1725	3	208	2.0	4620M	---	96933	---	---	---	---	---
915	DRILL PRESS	.50	1725	3	208	1.9	63A	K	75544	---	---	---	---	---
915	CONVEYOR MOTOR	.50	1725	3	208	4.0	L56C	P	NONE	---	---	---	---	---
915	BAND SAW MOTOR	.75	1725	3	208	2.6	56	K	75340	---	---	---	---	---
915	CONDENSATE MOTOR	1.50	1740	3	220	4.2	RS204	GZE	64005	---	---	---	---	---
915	SPENCER VACUUM MOTOR	5.00	3500	3	208	15.8	184T	K	95860	---	---	---	---	---
915	SPENCER VACUUM MOTOR	5.00	3500	3	208	15.8	184T	K	95858	---	---	---	---	---
915	CONVEYOR MOTOR	---	1725	3	200	2.3	M48Y	P	NONE	---	---	---	---	---
915	CONVEYOR MOTOR	---	1725	3	208	2.3	M48Y	P	NONE	---	---	---	---	---
917	FAN HEATER BLOWER	1.00	1740	3	208	3.3	204	OS	41203	---	---	---	---	---
917	WINDOW EXHAUST DRIVE	1.50	1725	1	115	18.4	184	KC	NONE	---	---	---	---	---
917	CONDENSATE MOTOR	1.50	1740	1	220	4.2	204RS	GZE	64006	---	---	---	---	---
917	OSMEFAN	---	---	1	110	.6	---	---	NONE	---	---	---	---	---
917	OSMEFAN	---	---	1	110	.6	---	---	NONE	---	---	---	---	---
918	CONDENSATE PUMP	.50	1440	3	208	1.7	---	---	NONE	---	---	---	---	---
918	AIR HANDLER BLOWER	1.00	1740	3	208	3.3	204	OS	41308	---	---	---	---	---
918	OSMEFAN	---	---	1	110	.6	---	---	41214	---	---	---	---	---
918	OSMEFAN	---	---	1	110	.6	---	---	NONE	---	---	---	---	---
920	FAN MOTOR	.33	1725	1	115	2.8	56	---	NONE	---	---	---	---	---
920	HEATER FAN MOTOR #2	.50	1140	1	115	9.4	56	R	NONE	---	---	---	---	---
920	HEATER FAN MOTOR #1	.50	1140	1	115	9.4	56	K	NONE	---	---	---	---	---
920	HEATER FAN MOTOR #9	.50	1140	1	115	9.4	56	K	NONE	---	---	---	---	---
920	HEATER FAN MOTOR #3	.50	1140	1	115	9.4	56	R	NONE	---	---	---	---	---
920	HEATER FAN MOTOR #6	.50	1140	1	115	9.4	56	K	NONE	---	---	---	---	---

DAY AND ZIMMERMAN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
920	HEATER FAN MOTOR #7	.50	1140	1	115 230	9.4 4.7	56	K	NONE	---	---	---	---	---
920	HEATER FAN MOTOR #8	.50	1140	1	115 230	9.4 4.7	56	K	NONE	---	---	---	---	---
920	HEATER FAN MOTOR #4	.50	1140	1	115 230	9.4 4.7	56	R	NONE	---	---	---	---	---
920	HEATER FAN MOTOR #5	.50	1140	1	115 230	9.4 4.7	56	K	NONE	---	---	---	---	---
920	MOTOR	.75	1150	3	440	90.0	---	---	75541	---	---	---	---	---
920	CONDENSATE PUMP	.75	1735	3	220 440	2.4 1.2	A66	---	69269	---	---	---	---	---
920	EXHAUST FAN	5.00	1745	3	208 220 440	15.2 14.4 7.2	215	P	90499	---	---	---	---	---
920	BATTERY CHARGER #5	---	---	3	220 440	520. 471.	---	---	---	---	---	---	---	---
920	EXIDE ELECT TRK RECT	---	---	3	220 440	36.8 18.4	---	---	---	---	---	---	---	---
920	BATTERY CHARGER #1	---	---	3	220 440	470. 421.	---	---	---	---	---	---	---	---
920	VACUUM PRODUCER	10.00	3500	3	220 440	26.0 13.0	284	JEX	68846	---	---	---	---	---
923	VACUUM PRODUCER	10.00	3520	3	220 440	26.0 13.0	284	JEX	35874	---	---	---	---	---
926	---	.75	1725	1	115 230	10.8 5.4	---	---	---	---	---	---	---	---
927	CONDENSATE PUMP	.50	1750	3	208 416	1.6 .8	81	SC	76746	---	---	---	---	---
927	ELEVATOR MOTOR	5.00	1000	3	208	18.0	284	AE	75539	---	---	---	---	---
929	EXHAUSTER DRIVE	20.00	3525	3	200	55.0	256T	CE4B	NONE	---	---	---	---	---
930	PUMP MOTOR	2.00	3450	3	230 460	5.3 2.9	---	TS	95958	---	---	---	---	---
930	COOLING TOWER FAN	2.50	1710	3	220 440	3.2 1.4	145T	---	NONE	---	---	---	---	---
930	AIR COMPRESSOR MOTOR	50.00	1175	3	220 440	126. 63.0	504	CS	02205	---	---	---	---	---
930	AIR COMPRESSOR MOTOR	75.00	1180	3	220 440	186. 93.0	607	---	02204	---	---	---	---	---
951	COOLING COMPRESSOR	1.50	1750	3	208 220 440	4.8 2.4	184	RT 1	88564	---	---	---	---	---
951	FAN FOR COOL TOWER	3.00	1750	3	220 440	9.0 4.5	225	HP12	76127	---	---	---	---	---
951	VACUUM UNIT MOTOR	5.00	3475	3	220 440	13.0 6.5	225	JES	45627	208	13.0	---	---	---
951	REFRIG COMPRESSOR	---	---	---	---	---	---	---	46095	---	---	---	---	---
997	EXHAUST FAN DRIVE	.75	---	1	115	9.1	---	---	95397	---	---	---	---	---
997	AIR DRYER - FAN	1.00	1075	1	460	3.3	---	US	NONE	---	---	---	---	---
997	AIR DRYER-COMPRESSOR	---	---	3	460	23.0	---	F	NONE	---	---	---	---	---
997	AIR COMPRESSOR MOTOR	125.0	870	3	440	154.	---	---	74833	---	---	---	---	---
997	DRIVE MOTOR SPECIAL	125.0	870	3	440	154.	SPECIAL	SC-680Y	74711	---	---	---	---	---

APPENDIX D

INACTIVE MOTORS SORTED BY LOCATION AND BY HORSEPOWER RATING AT EACH LOCATION -
BUILDING NUMBERS ABOVE 1000

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1002	CHEMICAL PUMP	.33	---	1	115 230	5.6 3.3	56	---	NONE	---	---	---	---	---
1002	#2 FUEL OIL PUMP	.75	1425	3	208 220 440	2.8 2.7 1.4	F56	PF	NONE	---	---	---	---	---
1002	#1 FUEL OIL PUMP	.75	1725	3	208 220 440	2.8 2.7 1.3	F56	PF	NONE	---	---	---	---	---
1002	OIL PUMP	5.00	1745	3	208	15.6	184T	K	845405	---	---	---	---	---
1002	STACK FAN MOTOR #1	5.00	1750	3	208	14.4	254	OS	02263	---	---	---	---	---
1002	STACK FAN BOILER #2	5.00	1750	3	208	14.4	254	08	00521	---	---	---	---	---
1002	BLOWER MOTOR	7.50	1800	3	200	22.4	A001200	COSO	NONE	---	---	---	---	---
1002	BLOWER #3 BOILER	7.50	1800	3	200	21.2	AFO-1200	COSO	NONE	---	---	---	---	---
1002	#2 BOILER MOTOR	7.50	1800	3	208	21.2	AFO-1200	COSO	NONE	---	---	---	---	---
1002	STACK FAN BOILER #3	15.00	1445	3	208	18.5 14.6	254	K	05071	---	---	---	---	---
1002	BOILER FEED WATER #3	15.00	3515	3	200	42.7	254T	---	NONE	---	---	---	---	---
1002	BOILER FEED WATER #1	15.00	3515	3	200	42.7	254T	---	NONE	---	---	---	---	---
1002	BOILER FEED WATER #2	15.00	3515	3	200	42.7	254T	---	NONE	---	---	---	---	---
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	6.2	56C	---	725809	---	---	---	---	---
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	6.2	56C	---	725811	---	---	---	---	---
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	6.2	56C	---	725813	---	---	---	---	---
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	6.2	56C	---	725809	---	---	---	---	---
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	6.2	56C	---	725808	---	---	---	---	---
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	6.2	56C	---	725812	---	---	---	---	---
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	6.2	56C	---	725813	---	---	---	---	---
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	6.2	56C	---	725811	---	---	---	---	---
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	6.2	56C	---	725808	---	---	---	---	---
1003	OVERHEAD HEATER	.50	1075	1	115	5.8 2.9	K56	CC	NONE	---	---	---	---	---
1003	OH HEATER FAN #1	.50	1075	1	115	5.8 2.9	K56	CC	NONE	---	---	---	---	---
1003	OVERHEAD HEATER FAN	.50	1140	1	115	8.4 4.2	L56	CS	NONE	---	---	---	---	---
1003	OH HEATER FAN #4	.50	1140	1	115	8.4 4.2	L56	CS	NONE	---	---	---	---	---
1003	OH HEATER FAN #9	.50	1140	1	115	8.4 4.2	L56	CS	NONE	---	---	---	---	---
1003	OH HEATER FAN #8	.50	1140	1	115	8.4 4.2	L56	CS	NONE	---	---	---	---	---
1003	OVERHEAD HEATER FAN	.50	1140	1	115	8.4 4.2	L56	CS	NONE	---	---	---	---	---
1003	OVERHEAD HEATER FAN	.50	1140	1	115	8.4 4.2	L56	CS	NONE	---	---	---	---	---
1003	OH HEATER FAN #2	.50	1140	1	115	8.4 4.2	L56	CS	NONE	---	---	---	---	---
1003	OH HEATER FAN #5	.50	1725	1	115	6.3	XD186Y	---	45799	---	---	---	---	---
1003	HEATER FAN MOTOR	.50	1725	1	110	6.3	XD186Y	FH	45801	---	---	---	---	---
1003	HEATER FAN MOTOR #3	.50	1725	1	110	6.3	XD186Y	FH	45801	---	---	---	---	---
1003	OH HEATER FAN #6	.50	1725	1	110	6.3	XD186Y	---	NONE	---	---	---	---	---
1003	OVERHEAD FAN MOTOR	.50	1725	1	115	6.3	XD186Y	---	45799	---	---	---	---	---
1003	OVERHEAD HEATER	.50	1725	1	110	6.3	XD186Y	---	NONE	---	---	---	---	---
1003	OVERHEAD HEATER	.50	1725	1	110	6.3	XD186Y	---	NONE	---	---	---	---	---
1003	OH HEATER FAN #7	.50	1725	1	110	6.3	XD186Y	---	NONE	---	---	---	---	---
1003	SUMP PIT CONDENSATE	.75	3450	3	208 220 440	2.5 1.3	G56	PFU3	98902	---	---	---	---	---
1003	CONDENSATE MOTOR	.75	3450	3	208 220 440	2.5 1.3	G56	PFU3	K989082	---	---	---	---	---
1003	STACK VENT FAN MOTOR	7.50	1755	3	230 460	19.8 9.9	213T	K	845893	---	---	---	---	---
1003	STACK VENT FAN MOTOR	7.50	1755	3	230 460	19.8 9.9	213T	K	845893	---	---	---	---	---
1003	EXHAUST FAN MOTOR	10.00	1735	3	220	---	---	CF4B	NONE	---	---	---	---	---
1003	EXHAUST FAN MOTOR	10.00	1735	3	220	29.4	---	CF4B	NONE	---	---	---	---	---
1003	EXHAUST FAN MOTOR	10.00	1735	3	220	29.4	---	CF4B	NONE	---	---	---	---	---
1003	EXHAUST FAN MOTOR	10.00	1735	3	220	29.4	---	CE4B	NONE	---	---	---	---	---
1003	EXHAUST FAN MOTOR	10.00	1735	3	220	29.4	---	CE4B	NONE	---	---	---	---	---
1005	HEATER FAN	.33	1140	1	115	6.0	KE56	---	NONE	---	---	---	---	---
1005	HEATER FAN MOTOR	.33	1140	1	115	6.0	K56	---	NONE	---	---	---	---	---

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1005	OVERHEAD DOOR MOTOR	.33	1725	1	115	6.2	56C	---	J725810	---	---	---	---	---
1005	OVERHEAD DOOR MOTOR	.33	1725	1	115	6.2	56C	---	V725814	---	---	---	---	---
1005	PAINT SHAKER	.33	1725	1	115	6.4	3.2	SY	128165	---	---	---	---	---
1005	OVERHEAD DOOR MOTOR	.33	1725	1	115	6.2	56C	---	725807	---	---	---	---	---
1005	BANDING MACHINE	.33	1800	1	230	4.6	56-4206E	---	NONE	---	---	---	---	---
1005	CONV. DRIVE MOTOR	.50	1725	3	208	2.1	1.0	1.0	NONE	---	---	---	---	---
1005	DELUGE COMPRESSOR	.50	1725	1	115	230	6.3	RA	70143	---	---	---	---	---
1005	BAND SAW KALAMAZOO	.50	1725	1	115	8.2	56	FZ	NONE	---	---	---	---	---
1005	THREADING MACHINE	.50	6000	1	115	8.0	86038	---	NONE	---	---	---	---	---
1005	CONVEY FEED TO OVEN	.75	---	3	208	220	4.4	1.2	7420NRW	---	---	---	---	---
1005	REEVES VARI REPLACE	1.00	1725	3	208	6.3	56C	P	96640	---	---	---	---	---
1005	PUMP DRIVE	1.00	1725	3	208	220	4.4	1.8	M-SGC	---	---	---	---	---
1005	REEVES VARI REPLACE	1.00	1725	3	208	6.3	56C	P	96641	---	---	---	---	---
1005	VERTICAL BELT SANDER	1.00	1725	3	208	6.3	56C	---	91095	---	---	---	---	---
1005	REEVES VARI REPLACE	1.00	1725	3	208	6.3	56C	---	96640	---	---	---	---	---
1005	REEVES VARI REPLACE	1.00	1725	3	208	6.3	56C	---	96641	---	---	---	---	---
1005	CONVEYOR DRIVE MOTOR	1.00	1730	3	208	220	4.4	2.2	P	J478959	---	---	---	---
1005	DRILL PRESS MOTOR	1.50	1140	3	208	---	---	---	EGGY	---	---	---	---	---
1005	REEVES VARI REPLACE	1.50	1725	3	208	8.0	56CZ	---	P	96652	---	---	---	---
1005	REEVES VARI REPLACE	1.50	1725	3	208	8.0	56CZ	---	P	96652	---	---	---	---
1005	REEVES VARI REPLACE	1.50	1725	3	208	8.0	56CZ	---	P	96651	---	---	---	---
1005	REEVES VARI REPLACE	1.50	1725	3	208	8.0	56CZ	---	P	96651	---	---	---	---
1005	CONVEYOR DRIVE	1.50	1735	3	208	4.4	143T	---	NONE	---	---	---	---	---
1005	OVEN DRIVE MOTOR	1.50	1735	3	230	4.6	145T	---	NONE	---	---	---	---	---
1005	SPARE F/OVEN IN 1005	1.50	1740	3	230	4.6	5.2	2.6	RG	---	---	---	---	---
1005	COOL TWR CIRCULATING	1.50	1745	3	230	4.6	5.0	2.5	SL	49	---	---	---	---
1005	DRILL PRESS MOTOR	2.00	1140	3	220	4.4	6.4	3.2	K	90930	---	---	---	---
1005	REEVES VARI REPLACE	2.00	1725	3	208	8.2	8.2	---	P	96658	---	---	---	---
1005	REEVES VARI REPLACE	2.00	1725	3	208	8.2	8.2	---	P	96658	---	---	---	---
1005	OVERHEAD HEATER	2.00	1750	3	208	5.8	225	---	OS	---	---	---	---	---
1005	OVERHEAD HEATER	2.00	1750	3	208	5.8	225	---	OS	---	---	---	---	---
1005	GRINDER MOTOR	3.00	1725	3	208	220	4.4	7.4	3.7	90597	---	---	---	---
1005	METAL CUT OFF SAW	3.00	3450	3	208	4.4	56X	---	NONE	---	---	---	---	---
1005	AIR HANDLER MOTOR	5.00	1745	3	230	4.6	184T	---	TDR-BE	---	---	---	---	---
1005	CONDENSER FAN MOTOR	5.00	1745	3	230	4.6	184T	---	TDR-BE	---	---	---	---	---
1005	SUMP PUMP	---	1735	3	208	1.6	---	---	76237	---	---	---	---	---
1005	CIRCULATING PUMP	---	---	3	---	---	---	---	910766	---	---	---	---	---
1005	WORTHING AIR COMPRES	100.0	1750	3	230	4.6	404T-18	---	R	---	---	---	---	---
1006	HEATER FAN MOTOR	.33	1140	1	115	6.0	K56	---	SP	---	---	---	---	---
1006	CONVEYOR DRIVE MOTOR	.50	1725	3	208	220	1.8	1.0	P	J500293	---	---	---	---
1006	HEATER PUMP DRIVE	.50	1725	3	208	220	2.9	---	---	---	---	---	---	---
1006	HEATER PUMP DRIVE	.50	1745	3	208	220	2.9	---	---	---	---	---	---	---
1006	CONDENSATE PUMP	.75	3450	3	208	220	4.4	2.6	1.3	---	---	---	---	---
1006	HOT WTR CIRCULATING	1.00	1735	3	208	4.3	4.3	---	---	---	---	---	---	---
1006	RED WATER PUMP CROSS	1.00	1735	3	208	4.3	143T	---	CE4B	SL91076	---	---	---	---
1006	HOT WTR CIRCULATING	1.00	1745	3	208	240	4.2	4.0	SC	J542313	---	---	---	---
1006	INCLINE CAN. MOTOR	1.50	1725	3	230	4.6	5.6	2.8	3	J976475	---	---	---	---
1006	CIRCULATING PUMP	2.00	1735	3	208	---	7.4	---	L	SN43378	---	---	---	---
1006	CIRCULATING PUMP	2.00	1735	3	208	---	7.4	---	L	SN48378	---	---	---	---
1006	CONDENSER MOTOR	2.00	1735	3	230	4.6	6.0	3.0	TDR-BE	NONE	---	---	---	---
1006	AIR HANDLER MOTOR	3.00	1730	3	240	280	9.4	4.7	---	NONE	---	---	---	---
1006	ROTO-CLONE BLOWER	3.00	1740	3	220	440	9.0	4.5	APPZZ	K765214	---	---	---	---

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1006	FAN MOTOR	3.00	1740	3	220	4.5	225	AP Z	65421	---	---	---	---	---
1006	FAN MOTOR	3.00	3500	3	208	10.2	182T	K	J796164	---	---	---	---	---
1006	ELEVATOR MOTOR	5.00	1000	3	208	18.0	284	---	79466	---	---	---	---	---
1006	ELEVATOR DRIVE MOTOR	5.00	1000	3	208	18.0	284	---	79465	---	---	---	---	---
1006	ELEVATOR DRIVE MOTOR	5.00	1000	3	208	18.0	284	---	79465	---	---	---	---	---
1006	CENTER KETTLE DRIVE	5.00	1700	3	208	14.7	254	---	09662	---	---	---	---	---
1006	EXHAUST FAN MOTOR	5.00	1740	3	220	14.0	254	AP Z	65415	---	---	---	---	---
1006	ROTO-CLONE BLOWER	5.00	1740	3	230	13.0	184T	R622	K654464	---	---	---	---	---
1006	ROTO-CLONE BLOWER	5.00	1740	3	220	12.8	254	EK	69189	---	---	---	---	---
1006	ROTO-CLONE BLOWER	5.00	1740	3	220	12.8	254	SC	70675	---	---	---	---	---
1006	EXHAUST FAN MOTOR	5.00	1740	3	220	14.0	254	---	65417	---	---	---	---	---
1006	CONVEYOR DRIVE MOTOR	5.00	1740	3	220	14.2	184T	---	NONE	---	---	---	---	---
1006	ROTO-CLONE BLOWER	5.00	1745	3	208	15.0	184T	CE4B	362525	---	---	---	---	---
1006	ROTO-CLONE BLOWER	5.00	1745	3	208	15.0	184T	CE4B	K362523	---	---	---	---	---
1006	NORTH KETTLE MOTOR	10.00	1735	3	208	26.6	215T	CE4B	J507892	---	---	---	---	---
1006	SOUTH KETTLE DRIVE	10.00	1745	3	208	27.6	324	K	44562	---	---	---	---	---
1010	DRILL PRESS MOTOR	1.00	1130	3	220	3.4	204	K	76709	---	---	---	---	---
1010	GRINDER DRIVE MOTOR	3.00	1725	3	200	7.4	6228M	S11864	NONE	---	---	---	---	---
1011	POWER 90 DRIVE MOTOR	.33	1725	1	115	5.2	J56	CS	NONE	---	---	---	---	---
1011	POWER 90 CONVEYOR	.33	1725	1	115	6.2	56C	---	K605352	---	---	---	---	---
1011	BAND CUTTER MOTOR	.50	1800	3	115	2.3	56-4206E	---	NONE	---	---	---	---	---
1011	INCLINE CONVEYOR	.50	1725	3	208	2.0	NK143TC	---	J577036	---	---	---	---	---
1011	INCLINE TO S. ALTERN	.50	1725	3	208	2.2	NK143TC	---	7430671	---	---	---	---	---
1011	FIBER CONVEYOR DRIVE	.50	1725	3	200	2.4	M484	P	NONE	---	---	---	---	---
1011	CONVEYOR DRIVE	.50	1725	3	200	2.4	M484	P	NONE	---	---	---	---	---
1011	CONVEYOR DRIVE MOTOR	.50	1725	3	208	1.8	K56	P	NONE	---	---	---	---	---
1011	CUP CONVEYOR DRIVE	.50	1725	3	200	2.4	M48Y	P	NONE	---	---	---	---	---
1011	MTR ON SPR BOX CLOSE	.50	1725	3	230	2.0	56C416M	---	NONE	---	---	---	---	---
1011	CONVEYOR DRIVE	.50	1725	3	200	2.4	M49Y	P	NONE	---	---	---	---	---
1011	CONVEYOR DRIVE	.50	1725	3	200	2.4	M48V	P	NONE	---	---	---	---	---
1011	STEEL CONVEYOR DRIVE	.50	1725	3	200	2.4	M48Y	P	NONE	---	---	---	---	---
1011	CONVEYOR DRIVE	.50	1725	3	200	2.4	M48Y	P	NONE	---	---	---	---	---
1011	CONVEYOR DRIVE MOTOR	.50	1725	3	208	2.0	56C-416M	---	J501400	---	---	---	---	---
1011	CHAIN ON BOX CLOSER	.50	1725	3	230	2.0	145T	P	NONE	---	---	---	---	---
1011	CONVEYOR DRIVE MOTOR	.50	1730	3	208	5.8	145T	FB	J479465	---	---	---	---	---
1011	FIBER GROSS FEED CON	.50	1750	3	220	5.8	L56	CS	NONE	---	---	---	---	---
1011	HEATER FAN DRIVE	.50	---	1	115	8.4	L56	---	NONE	---	---	---	---	---
1011	BOX CLOSER CONVEYOR	.75	1725	3	---	2.2	56C 520M	---	NONE	---	---	---	---	---
1011	FAN DRIVE	.75	1725	3	208	2.2	G56	P	NONE	---	---	---	---	---
1011	CONVEYOR DRIVE MOTOR	.75	1725	3	208	2.6	L56	P	J501335	---	---	---	---	---
1011	CONVEYOR DRIVE MOTOR	.75	1725	3	200	2.1	LA56C	---	NONE	---	---	---	---	---
1011	CONVEYOR DRIVE	.75	1725	3	208	2.2	56C 520M	---	NONE	---	---	---	---	---
1011	CONVEYOR MOTOR	.75	1725	3	220	2.6	M56	P	NONE	---	---	---	---	---
1011	FAN DRIVE	.75	1725	3	208	2.8	G56	P	NONE	---	---	---	---	---
1011	BOX CONVEYOR DRIVE	.75	1725	3	208	2.6	L56	---	J501336	---	---	---	---	---
1011	CONVEYOR DRIVE	.75	1725	3	230	2.2	56C 520M	---	19	---	---	---	---	---
1011	CONVEYOR MOTOR	.75	1725	3	220	2.6	M56	P	NONE	---	---	---	---	---
1011	CONVEYOR DRIVE	.75	1725	3	200	2.1	LA56C	SC	NONE	---	---	---	---	---
1011	BOX CONVEYOR MOTOR	.75	1725	3	200	4.0	K56	P	5901906	---	---	---	---	---
1011	VACUUM PUMP MOTOR	1.00	1125	3	208	3.4	56	---	NONE	---	---	---	---	---
1011	VACUUM PUMP MOTOR	1.00	1125	3	208	3.2	56	---	NONE	---	---	---	---	---
1011	FAN DRIVE MOTOR	1.00	1140	1	---	5.8	56	---	K55527	---	---	---	---	---

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COS
1011	INCOM CANISTER BELT	1.00	1200	3	220 440	8.4	4.8	13-244-4	VE-SESV 74774	---	---	---	---	---
1011	INCLINE CONVEYOR	1.00	1725	3	200	3.0	---	KA56CZ	SC	---	---	---	---	---
1011	MAIN DRIVE-BOX STAPL	1.00	1725	3	208	3.4	---	56 520M	NONE	---	---	---	---	---
1011	CONVEYOR DRIVE	1.00	1725	3	200	4.7	---	L56	P	---	---	---	---	---
1011	MAIN DRIVE-BOX STAPL	1.00	1725	3	208	3.4	---	56 520	NONE	---	---	---	---	---
1011	CONVEYOR DRIVE	1.00	1725	3	230	4.1	---	L56	P	---	---	---	---	---
1011	MAIN DRIVE-BOX STAPL	1.00	1725	3	208	220 440	3.4	3.2	56 520M	---	---	---	---	---
1011	CROSS FEED CONVEYOR	1.00	1730	3	220 440	3.0	1.5	NA203	QZX	---	---	---	---	---
1011	MAIN CONVEYOR MOTOR	1.00	1730	3	208	220 440	3.4	2.2	143T	P	---	---	---	---
1011	HYDRAULIC PUMP DRIVE	1.00	3450	3	208	---	---	56C 513M	---	---	---	---	---	---
1011	HYDRAULIC PUMP MOTOR	1.00	3450	3	208	---	---	56C 513M	---	---	---	---	---	---
1011	HYDRAULIC PUMP DRIVE	1.00	3450	3	208	220 440	3.4	3.2	56C 513M	---	---	---	---	---
1011	CONVEYOR DRIVE	1.00	---	3	200	4.7	---	L56	P	---	---	---	---	---
1011	S METRO DRIVE MOTOR	1.50	1125	3	208	4.6	---	184	NONE	---	---	---	---	---
1011	BOX STENCIL MACHINE	1.50	1140	3	208	220 440	5.0	2.5	PM184	---	---	---	---	---
1011	STITCHER DRIVE	1.50	1725	3	230	---	---	145TC	NONE	---	---	---	---	---
1011	STITCHER DRIVE	1.50	1725	3	208	---	---	14TE-524M	---	---	---	---	---	---
1011	CONVEYOR DRIVE MOTOR	1.50	1725	3	200	---	---	R56C2	P	---	---	---	---	---
1011	PORTABLE CONVEYOR	1.50	1725	3	208	---	---	P56C2	P	---	---	---	---	---
1011	N METRO MAIN DRIVE	1.50	1725	3	208	220 440	4.2	2.1	184 817M	---	---	---	---	---
1011	CONVEYOR DRIVE MOTOR	1.50	1725	3	200	---	---	P56CF	P	---	---	---	---	---
1011	MAIN CONVEY SO. SIDE	1.50	1725	3	208	---	---	P56C2	P	---	---	---	---	---
1011	STITCHER DRIVE	1.50	1725	3	208	---	---	145TC 524	---	---	---	---	---	---
1011	CONVEYOR DRIVE	1.50	1730	3	208	---	---	145T	NONE	---	---	---	---	---
1011	SOUTH INCLINE/DRIVE	1.50	1730	3	208	220 440	5.8	2.9	145	P	---	---	---	---
1011	FIBER CONVEYOR	1.50	1750	3	208	220 440	5.8	2.9	145T	P	---	---	---	---
1011	MAIN DRV ON STENCIL	2.00	1740	3	208	220 440	5.9	---	H184	---	---	---	---	---
1011	CHAIN ON BOX CLOSER	3.00	1725	3	230	---	---	56C-416M	PFU3	---	---	---	---	---
1011	CROSS CONVEYOR DRIVE	3.00	1725	3	---	---	---	145TC	J305805	---	---	---	---	---
1011	CONVEYOR DRIVE	3.00	1730	3	200	---	---	145T	NONE	---	---	---	---	---
1011	CONVEYOR DRIVE	3.00	1800	3	200	---	---	M48 V	74713	---	---	---	---	---
1011	CONVEYOR DRIVE MOTOR	5.00	1730	3	200	---	---	---	VEV-1-L	---	---	---	---	---
1011	CONVEYOR DRIVE MOTOR	5.00	1800	3	208	220 440	18.9	---	J413390	---	---	---	---	---
1011	VACUUM PUMP DRIVE	7.50	1735	3	220	---	---	23-215-30	J705412	---	---	---	---	---
1011	CONVEYOR DRIVE MOTOR	---	---	3	200	---	---	E	NONE	---	---	---	---	---
1011	WIRE TIER - PUMP	10.00	1725	3	200	---	---	---	L602584	---	---	---	---	---
1011	HYDRAULIC PUMP MOTOR	10.00	1800	3	200 400	29.0	14.5	21ST	IKH	---	---	---	---	---
1011	WIRE TIER - PUMP	10.00	1800	3	200 400	29.0	14.5	23-225-4	VEVS EV	---	---	---	---	---
1014	WINDOW FAN MOTOR	.75	1725	3	208 220 440	3.0	1.5	56	---	---	---	---	---	---
1014	WINDOW FAN MOTOR	.75	1725	3	208 220 440	3.0	1.5	56	NONE	---	---	---	---	---
1014	WINDOW FAN MOTOR	.75	1725	3	208 220 440	3.0	1.5	56	NONE	---	---	---	---	---
1014	WINDOW FAN MOTOR	.75	1725	3	208 220 440	3.0	1.5	56	NONE	---	---	---	---	---
1014	AIR HANDLER FAN	1.50	1730	3	220 440	4.8	2.4	204	APT	---	---	---	---	---
1014	AIR HANDLER FAN	1.50	1730	3	220 440	4.8	2.4	204	APT	---	---	---	---	---
1015	EXHAUST FAN	.75	1725	3	208 440	3.0	1.5	56M6	---	---	---	---	---	---
1015	FAN MOTOR	.75	1725	3	208 440	3.0	1.5	56-M6	NONE	---	---	---	---	---
1015	CONDENSATE PUMP	.75	3450	3	208	---	---	---	NONE	---	---	---	---	---
1015	BLOWER FOR HEATER	1.50	1730	3	208 440	4.5	2.3	204	K	---	---	---	---	---
1017	CONVEYOR DRIVE MOTOR	.50	1725	3	208 220 440	1.2	.9	---	J500043	---	---	---	---	---
1017	POWER TO CONVEYOR	.50	1725	3	208 220 440	1.8	.9	K56	P	---	---	---	---	---
1017	CONDENSATE PUMP	.75	3450	3	208 230 460	2.6	1.3	K56	A	---	---	---	---	---

DAY AND ZIMMERMAN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1017	CONVEYOR DRIVE	1.00	1730	3	208 440	4.3 2.2	143T	---	J478958	---	---	---	---	---
1017	CONVEYOR DRIVE	1.00	1730	3	208 440	4.3 2.2	---	---	J478957	---	---	---	---	---
1017	CIRCULATING PUMP	1.00	1740	3	208 416	3.4 1.7	203	EIS	41955	---	---	---	---	---
1017	PUMP MOTOR	1.00	1740	3	208	3.6	203	EIX	66475	---	---	---	---	---
1017	TNT SHAKER MOTOR	3.00	860	3	208	10.6	---	---	02784	---	---	---	---	---
1017	TNT SHAKER DRIVE	3.00	870	3	208	10.4	284	HP	09953	---	---	---	---	---
1017	ELEVATOR MOTOR	5.00	1000	3	208	18.0	---	---	NONE	---	---	---	---	---
1017	TNT SHAKER MOTOR	5.00	1730	3	220 440	13.9 7.0	---	---	SA67175	---	---	---	---	---
1017	EXHAUST VENT DRIVE	5.00	1740	3	220 440	12.8 6.4	---	---	69771	---	---	---	---	---
1018	FAN DRIVE MOTOR	1.00	1075	3	460	3.3	48	UF	NONE	---	---	---	---	---
1018	COOL TWR CIRCULATING	2.00	3450	3	440	2.9	56-10	TS	95959	---	---	---	---	---
1018	FAN DRIVE	2.50	1710	3	460	3.2 1.4	145T	K	NONE	---	---	---	---	---
1018	COMPRESSOR ON DRYER	200.0	---	3	460	19.0	---	F	NONE	---	---	---	---	---
1018	AIR COMPRESSOR	.33	300	3	---	21.2	---	---	76695	---	---	---	---	---
1019	AUTO SCALES CONVEYOR	.33	1725	1	115 230	5.6 2.8	56C	P	09041	---	---	---	---	---
1019	SCALE CONVEYOR DRIVE	.33	1725	1	115 230	5.6 2.8	56C	---	FH51578	---	---	---	---	---
1019	CONVEYOR DRIVE MOTOR	.33	1725	3	220 440	1.6	F56	---	74645	---	---	---	---	---
1019	CONDENSER FAN MOTOR	.50	825	1	208 230	2.9	---	PSC	NONE	---	---	---	---	---
1019	CONVEYOR DRIVE MOTOR	.50	1725	3	208 220 440	1.8	K56	P	J501408	---	---	---	---	---
1019	STENCIL MACHINE	.50	1725	3	230 460	2.2 1.1	L56C	P	K583456	---	---	---	---	---
1019	CONVEYOR DRIVE MOTOR	.50	1725	3	208	2.7	K56	P	L636498	---	---	---	---	---
1019	CONVEYOR MOTOR	.50	1725	3	208 220 440	2.3 1.2	M48Y	P	NONE	---	---	---	---	---
1019	CONVEYOR DRIVE MOTOR	.75	1725	3	200	5.3	L56C	P	M875094	---	---	---	---	---
1019	MARKER DRIVE MOTOR	.75	1725	3	208 220 440	2.6 1.3	256C	P	H07176	---	---	---	---	---
1019	CONVEYOR DRIVE MOTOR	.75	1800	3	208	3.9	6-56-5	VAVEFGD	J74749	---	---	---	---	---
1019	CONDENSER PUMP DRIVE	.75	3450	3	208 220 440	2.5 1.3	G56	PFU3	L711964	---	---	---	---	---
1019	CONVEYOR MOTOR	1.00	1130	3	208	3.6	204	K	71534	---	---	---	---	---
1019	X-OMAT BLOWER MOTOR	1.00	1725	1	115 230	12.0 6.0	---	---	090915	---	---	---	---	---
1019	CONVEYOR - NO. LINE	1.00	1725	3	208	6.0	L56G	P	NONE	---	---	---	---	---
1019	X-OMAT BLOWER MOTOR	1.00	1725	1	115 230	12.0 6.0	---	---	087492	---	---	---	---	---
1019	DISCHRG & LOAD CONVE	1.00	1725	3	200	4.7	L56	P	96139	---	---	---	---	---
1019	HEATER-A/C FAN MOTOR	1.00	1730	3	208 220 440	2.9 2.8	L56	P	J417687	---	---	---	---	---
1019	CONVEYOR DRIVE MOTOR	1.50	1730	3	208 220 440	5.3 4.9	184	EN	L602583	---	---	---	---	---
1019	CONVEYOR DRIVE MOTOR	2.00	1745	3	208 220 440	7.4 3.5	184	AEX	500569	---	---	---	---	---
1019	VACUUM PRODUCER	5.00	3500	3	200	15.8	184T	K	NONE	---	---	---	---	---
1019	VACUUM PRODUCER	5.00	3500	3	200	15.8	---	---	804361	---	---	---	---	---
1019	HYDRAULIC PUMP MOTOR	7.50	1750	3	230	20.8	213T	K	M804365	---	---	---	---	---
1019	LOWER DRIVE MOTOR	7.50	1755	3	208	21.0	254U	K	NONE	---	---	---	---	---
1019	SOUTH CONVEYOR DRIVE	7.50	1755	3	208	21.0	254U	K	601592	---	---	---	---	---
1019	UPPER DRIVE MOTOR	7.50	1755	3	208	21.0	254U	K	L601594	---	---	---	---	---
1019	VARI-DRIVE CONVEYOR	10.00	3500	3	220 440	26.0 13.0	284	JEY	L601586	---	---	---	---	---
1019	VACUUM PUMP MOTOR	10.00	3530	3	220 440	27.0 13.5	254U	K	601588	---	---	---	---	---
1019	HYDRAULIC PUMP MOTOR	15.00	---	3	230	41.0	254T	L	62929	---	---	---	---	---
1025	AIR DRYER FAN	.50	1075	3	208 440	2.0 1.7	48	UF	089872	---	---	---	---	---
1025	COOLING TOWERS - FAN	.50	1725	3	208 440	1.8	H-56	RP	NONE	---	---	---	---	---
1025	COMPRESSOR AIR DRYER	250.0	585	3	460	---	6343	---	091316	---	---	---	---	---
1051	CONDENSER FAN MOTOR	.33	825	1	208 240	2.1	48	SC	NONE	---	---	---	---	---
1051	CONDENSER FAN MOTOR	.33	825	1	208 240	2.0	---	PSC	NONE	---	---	---	---	---

DAY AND ZIMMERMAN JUNIACUON OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1051	CONDENSER FAN MOTOR	.33	825	1	208 240	2.1	---	---	NONE	---	---	---	---	---
1051	CONDENSER FAN #3	.33	825	1	208 240	2.1	48	SC	NONE	---	---	---	---	---
1051	CONDENSER FAN MOTOR	.33	---	1	---	2.3	---	---	NONE	---	---	---	---	---
1051	CONDENSER FAN MOTOR	.33	---	1	208 240	2.3	---	---	NONE	---	---	---	---	---
1051	AIR HANDLER MOTOR	3.00	3460	3	208 220 440	7.6	F66	TDR-BH	NONE	---	---	---	---	---
1051	BLOWER AIR CONDITION	3.00	3460	3	208 220 440	7.6	F66	TDR-BH	NONE	---	---	---	---	---
1055	CONVEYOR DRIVE	5.00	1800	3	220 440	17.4	23-254-4	VC-D VE	70962	---	---	---	---	---
1065	HEATER FAN	.33	1140	1	115	6.0	K56	SP	NONE	---	---	---	---	---
1065	HEATER FAN	.33	1140	1	115	6.0	K56	SP	NONE	---	---	---	---	---
1065	HEATER FAN	.33	1725	1	115 230	4.8	R56	CS	J494394	---	---	---	---	---
1065	PRESS DISCHRG CONVEY	.33	1725	1	115 230	5.6	56C	---	J729663	---	---	---	---	---
1065	HEATER FAN MOTOR	.33	1725	1	115 230	4.8	R56	CS	H431448	---	---	---	---	---
1065	HEATER FAN MOTOR	.33	1725	1	115 230	4.8	R56	CS	H431450	---	---	---	---	---
1065	CONVEYOR DRIVE	.50	1725	3	208	2.1	560 513W	---	NONE	---	---	---	---	---
1065	LID PULLER MOTOR	.75	1725	3	200	5.3	L56C	P	L357111	---	---	---	---	---
1065	FAST LID PULLER	.75	1725	3	200	5.3	L56C	P	815355	---	---	---	---	---
1065	LID PULLER - S-WEST	.75	1725	3	240	5.3	L56C	P	NONE	---	---	---	---	---
1065	FIBER CONVEYOR MOTOR	.75	1725	3	220 440	2.3	H66	---	69682	---	---	---	---	---
1065	LID PULLER DRIVE	.75	1725	3	200	5.3	L56C	P	M875354	---	---	---	---	---
1065	LID PULLER DRIVE	.75	1725	3	200	5.3	L56C	P	875353	---	---	---	---	---
1065	W. LID PULL - S-WEST	.75	1725	3	240	5.3	265C	P	J381324	---	---	---	---	---
1065	CONDENSATE RETURN	.75	3450	3	208	2.5	G56	PFU3	FL71196	---	---	---	---	---
1065	HEATER FAN MOTOR	1.00	1725	1	115 230	4.8	R56	CS	NONE	---	---	---	---	---
1065	BRASS CONVEYOR/E-W	1.00	1725	3	208 220 440	3.6	M56	P	480015	---	---	---	---	---
1065	LAST DRIVE CONVEYOR	1.00	1725	3	230	4.1	L56	P	NONE	---	---	---	---	---
1065	MOONEY PRESS DRIVE	1.00	1725	3	200	6.3	L56C	P	J738486	---	---	---	---	---
1065	CONVEYOR DRIVE MOTOR	1.00	1725	3	208 220 440	3.6	M56	P	NONE	---	---	---	---	---
1065	CONVEYOR DRIVE MOTOR	1.00	1725	3	208 220 440	3.6	M56	P	J479255	---	---	---	---	---
1065	CONVEYOR DRIVE MOTOR	1.00	1725	3	200	4.1	L56	P	K329292	---	---	---	---	---
1065	PRESS FEED CONVEYOR	1.00	1725	3	208 220 440	3.6	M56	P	J479259	---	---	---	---	---
1065	EAST OH CONVEYOR	1.00	1725	3	200	6.3	L56C	P	843753	---	---	---	---	---
1065	OVERHEAD CONVEYOR	1.00	1725	3	200	6.3	L56C	P	M843659	---	---	---	---	---
1065	BRASS PRIM FEED CONV	1.00	1725	3	208 220 440	3.6	M56	P	SJ47925	---	---	---	---	---
1065	CONVEY FOR PRIM PRES	1.00	1725	3	230 460	4.1	L56	P	SMB6603	---	---	---	---	---
1065	2 DRV ON CONV PRIMER	1.00	1725	3	230	4.1	L56	P	M847312	---	---	---	---	---
1065	FIBER CONVEYOR DRIVE	1.00	1725	3	240	6.3	L56C	P	843656	---	---	---	---	---
1065	CONVEYOR DRIVE MOTOR	1.00	1725	3	208 220 440	3.6	K56	P	J479260	---	---	---	---	---
1065	SPENCER VACUUM UNIT	1.00	3450	3	208 220 440	3.4	56	---	486704	---	---	---	---	---
1065	CONVEYOR DRIVE MOTOR	1.50	1155	3	200	5.8	182T	P	J753217	---	---	---	---	---
1065	FIBER CONV TO INCLNE	1.50	1725	3	220 440	4.4	204	PA	66158	---	---	---	---	---
1065	METRO PRIMER PRESS	2.00	1725	3	208	8.7	184 620M	---	N42255	---	---	---	---	---
1065	FIBER CONVEYOR DRIVE	2.00	1730	3	220	18.0	145T	P	NONE	---	---	---	---	---
1065	HYDRAULIC PUMP MOTOR	7.50	1725	3	230	18.0	213T 744M	---	N44229	---	---	---	---	---
1068	VACUUM PUMP	25.00	3530	3	208	69.0	284TS	C24B	5504631	---	---	---	---	---
1068	VACUUM PUMP	25.00	3530	3	---	69.0	CE4B	CE	NONE	---	---	---	---	---
1075	SUMP PUMP MOTOR	.33	1725	1	230	2.2	564	SH	NONE	---	---	---	---	---
1075	PUMP MOTOR	1.00	1725	3	208 416	2.8	2010M	---	69252	---	---	---	---	---
1078	HOT WATER TANK PUMP	2.00	3450	3	200	7.5	56-10	TS	94686	---	---	---	---	---
1095	VACUUM UNIT MOTOR	5.00	3460	3	220 440	13.0	225	---	79468	---	---	---	---	---
1102	OVERHEAD HEATER	.33	1140	1	115 230	4.6	D186	DL	NONE	---	---	---	---	---
1102	#9 MOTOR	.33	1140	1	---	4.6	D186	DL	NONE	---	---	---	---	---
1102	OVERHEAD HEATER	.33	1140	1	115 230	4.2	D186	FL	NONE	---	---	---	---	---

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1102	OVERHEAD HEATER	.33	1140	1	110 220	4.8 2.3	D188	FL	NONE	---	---	---	---	---
1102	OVERHEAD HEATER	.33	1140	1	110 230	4.8 2.3	D188	FL	NONE	---	---	---	---	---
1102	OVERHEAD HEATER	.33	1140	1	115	4.6 3.2	D186	FL	NONE	---	---	---	---	---
1102	HEATER FAN	.33	1140	3	230 460	1.8 .9	56	---	FG88492	---	---	---	---	---
1102	OVERHEAD HEATER #1	.33	1140	1	110 230	4.8 2.3	D188	FL	NONE	---	---	---	---	---
1102	EXHAUST FAN MOTOR	.33	1725	1	115	5.6	---	---	NONE	---	---	---	---	---
1102	SAW DRIVE MOTOR	.33	1725	1	115	5.2	G48	SPS	091061	---	---	---	---	---
1102	GRINDER	.33	3000	1	115	5.2 4.6	---	---	76910	---	---	---	---	---
1102	OVERHEAD HEATER	.33	---	1	---	4.6 2.3	D186	DL	NONE	---	---	---	---	---
1102	OH HEATER FAN #3	.50	1140	1	115	7.4	C66	---	NONE	---	---	---	---	---
1102	TABLE SAW MOTOR	.50	1725	3	208	1.9	63A	K	75575	---	---	---	---	---
1102	GEARHEAD	.50	1725	3	208	3.3	K56	---	332593	---	---	---	---	---
1102	VARI-DRIVE GEARHEAD	.50	1725	3	208	4.0	L56C	P	87270	---	---	---	---	---
1102	GEARHEAD	.50	1725	3	208	3.3	K56	---	87268	---	---	---	---	---
1102	HEATER BLOWER MOTOR	.50	1740	3	220 440	2.0 1.0	163	---	67800	---	---	---	---	---
1102	POWER VISE	.50	14000	1	115	8.0	---	---	29	---	---	---	---	---
1102	SPARE DRILL PRESS	.75	1725	3	208	3.4	56	---	00596	---	---	---	---	---
1102	CONDENSATE PUMP	.75	1735	3	220 440	2.4 1.2	A66	---	69272	---	---	---	---	---
1102	REDWTR CIRCULAT PUMP	1.00	1735	3	200	4.3	143T	OE4B	L910767	---	---	---	---	---
1102	CIRCULATING PUMP	1.00	1740	3	200	4.5	143T	---	L660041	---	---	---	---	---
1102	VENT FAN	1.00	1740	1	115 230	14.4 7.2	E182	---	91325	---	---	---	---	---
1102	CIRCULATING PUMP	1.00	1740	3	200	4.5	143T	---	L660042	---	---	---	---	---
1102	SPARE MOTOR	1.50	1160	3	220 440	5.7 2.9	182T	GE4B	NONE	---	---	---	---	---
1102	VENTILATOR MOTOR	1.50	3600	3	208 440	5.3 2.5	182	RS	NONE	---	---	---	---	---
1102	EXHAUST FAN MOTOR	3.00	1730	3	230 460	8.7 4.4	182T	L	89808	---	---	---	---	---
1102	BLOWER AIR CONDITION	3.00	---	3	208 440	9.0 4.5	213	---	NONE	---	---	---	---	---
1102	AIR COMPRESSOR MOTOR	5.00	1725	3	200	16.6	184T	A	NONE	---	---	---	---	---
1102	VACUUM MOTOR	5.00	3460	3	208	13.9	184T	---	90936	---	---	---	---	---
1102	VACUUM UNIT MOTOR	5.00	3460	3	208	13.9	184T	CE4B	NONE	---	---	---	---	---
1102	PORTABLE VACUUM	5.00	3460	3	208	13.9	184T	---	90935	---	---	---	---	---
1102	VACUUM UNIT MOTOR	5.00	3475	3	220 440	13.0 6.5	225	JES	45627	---	---	---	---	---
1102	HEATER FAN	---	1500	1	115	2.0	---	---	NONE	---	---	---	---	---
1102	BATTERY CHARGER	---	---	1	115	16.0	---	---	78547	---	---	---	---	---
1102	SPARE KETTLE MOTOR	15.00	1750	3	208 220 440	4.2 4.0 2.0	254T	CE4B	J507571	---	---	---	---	---
1102	REDWATER PUMP MOTOR	20.00	1765	3	230 460	48.8 24.4	256TPH	LUNRR	R207081	---	---	---	---	---
1102	REDWATER PUMP MOTOR	20.00	1765	3	230 460	48.8 24.4	256TPH	LUNRR	R206437	---	---	---	---	---
1102	REDWATER PIT PUMP	20.00	1765	3	230 460	48.8 24.4	256TPH	LUNRR	R207081	---	---	---	---	---
1102	REDWATER PIT PUMP	20.00	1765	3	230 460	48.8 24.4	256TPH	LUNRR	R207081	---	---	---	---	---
1105	OIL PUMP MOTOR	.50	1725	3	208 220 440	1.9 1.8	D56	PF	NONE	---	---	---	---	---
1105	FUEL OIL PUMP MOTOR	.50	1725	3	208 220	1.8	D56	PF	NONE	---	---	---	---	---
1105	FUEL OIL PUMP #1	.75	1725	3	208 220 440	2.8 2.7 1.4	F56	PF	NONE	---	---	---	---	---
1105	FUEL OIL PUMP #2	.75	1725	3	208 220 440	2.8 2.7 1.4	F56	PF	NONE	---	---	---	---	---
1105	MAKEUP WTR TRANSFER	2.00	3460	3	200	6.9	R145T	COG4B	NONE	---	---	---	---	---
1105	MAKEUP WTR TRANSFER	2.00	3460	3	200	6.9	R145T	COG4B	NONE	---	---	---	---	---
1105	COMPRESSOR MOTOR AIR	5.00	1725	3	200	16.6	184T	A	NONE	---	---	---	---	---
1105	STACK BLOWER FAN #3	5.00	1735	3	208	14.6	254	K	08511	---	---	---	---	---
1105	STACK FAN #1	5.00	1735	3	208	14.6	254	OS	05072	---	---	---	---	---
1105	STACK FAN MOTOR #2	5.00	1750	3	208	14.4	254	OS	02263	---	---	---	---	---
1105	BOILER FEED PUMP #2	7.50	1745	3	200 400	23.4 11.7	213T	---	NONE	---	---	---	---	---
1105	PUMP MOTOR	7.50	1745	3	200 400	23.4 11.7	213T	---	NONE	---	---	---	---	---
1105	BURNER MOTOR	7.50	1800	3	200	22.4	AF0-1200	COSO	NONE	---	---	---	---	---
1105	BURNER MOTOR	7.50	1800	3	200	22.4	AF0-1200	COSO	NONE	---	---	---	---	---

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1105	BURNER MOTOR	7.50	1800	3	200	22.4	AFO-1200	COSO	NONE	---	---	---	---	---
1105	BURNER AIR & STACK 2	10.00	3465	3	200	27.5	215TD	TFS-BZD	NONE	---	---	---	---	---
1105	BURNER AIR & STACK 1	10.00	3465	3	200	27.5	215TD	TFS-BZD	NONE	---	---	---	---	---
1105	BOILER WATER FEED #1	15.00	3515	3	200	42.7	254T	---	NONE	---	---	---	---	---
1105	BOILER WATER FEED #3	15.00	3515	3	200	42.7	254T	---	NONE	---	---	---	---	---
1105	BOILER WATER FEED #2	15.00	3515	3	200	42.7	254T	---	NONE	---	---	---	---	---
1108	WATER EVAPORATOR COOLING	.75	1725	3	230 460	2.6 1.3	56-5	TS	NONE	---	---	---	---	---
1108	AIR COMPRESSOR DRIVE	125.0	1730	3	400	141	143T	TDR-8E	NONE	---	---	---	---	---
1109	CONDENSER FAN MOTOR	.33	825	1	440	1.3	405T	R	NONE	---	---	---	---	---
1109	CONDENSER FAN MOTOR	.33	825	1	440	1.3	---	---	07462	---	---	---	---	---
1109	HEATER FAN	.33	1140	3	230 460	1.8 .9	56	---	07462	---	---	---	---	---
1109	HOOD EXHAUST FAN	.33	1725	1	115	4.7	2D56	FH	NONE	---	---	---	---	---
1109	COMPRESSOR (1)	.33	---	1	440	1.3	---	---	07462	---	---	---	---	---
1109	OVERHEAD HEATER	.50	1140	1	115 230	9.4 4.7	7457	RA	6746219	---	---	---	---	---
1109	DRIVE MOTOR	.50	1725	3	208	4.0	L56C	P	NONE	---	---	---	---	---
1109	BELT DRIVE MOTOR	.50	1725	3	208	3.2	K56	P	87994	---	---	---	---	---
1109	DRIVE MOTOR	.50	1725	3	208	3.2	K56	P	NONE	---	---	---	---	---
1109	BELT DRIVE MOTOR	.50	1725	3	208	3.3	---	P	87271	---	---	---	---	---
1109	CONVEYOR MOTOR	.75	1725	3	208	5.3	L56C	P	88000	---	---	---	---	---
1109	GEARHEAD CONVEYOR	.75	1725	3	208	5.3	L56C	P	NONE	---	---	---	---	---
1109	DRIVE MOTOR	.75	1725	3	208	5.3	L56G	P	87313	---	---	---	---	---
1109	CIRCULATING PUMP	.75	1750	3	208	2.4	182CZ	P	90701	---	---	---	---	---
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	56535M	---	93442	---	---	---	---	---
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	56535M	---	93441	---	---	---	---	---
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	56535M	---	93443	---	---	---	---	---
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	56535M	---	93440	---	---	---	---	---
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	56535M	---	93440	---	---	---	---	---
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	56535M	---	93443	---	---	---	---	---
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	56535M	---	93441	---	---	---	---	---
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	56535M	---	93442	---	---	---	---	---
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	56535M	---	93442	---	---	---	---	---
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	56535M	---	93443	---	---	---	---	---
1109	HEAT TUNNEL DRIVE	1.00	1725	3	208	4.0	182	801X	NONE	---	---	---	---	---
1109	HEAT TUNNEL DRIVE	1.00	1725	3	208	4.0	182	AEIX	NONE	---	---	---	---	---
1109	#3 POUR CONV DRIVE	1.00	1725	3	208	6.0	---	P	87278	---	---	---	---	---
1109	CIRCULATING PUMP	1.00	1730	3	208 440	3.2 1.6	L56G	K	88599	---	---	---	---	---
1109	CIRCULATING PUMP	1.00	1730	3	208 220 440	3.2 1.6	182	K	88598	---	---	---	---	---
1109	CIRCULATING PUMP	1.00	1730	3	208 220 440	3.2 1.6	182	K	88597	---	---	---	---	---
1109	WATER PUMP MOTOR	1.00	1730	3	208 440	3.6 1.8	182CZ	---	89813	---	---	---	---	---
1109	CIRCULATING PUMP	1.00	1730	3	220 440	3.2 1.6	182	K	88596	---	---	---	---	---
1109	PRE-HEAT BLOWER	1.00	1745	3	208	4.3	143T	CE4B	NONE	---	---	---	---	---
1109	PUMP MOTOR	1.00	1745	3	200 208	4.2 4.0	143T	SC	NONE	---	---	---	---	---
1109	BLOWER MOTOR	1.00	1745	3	200	4.3	143T	CE4B	NONE	---	---	---	---	---
1109	EXHAUST BLOWER	1.50	1750	3	208 220 440	---	---	J	NONE	---	---	---	---	---
1109	PUMP MOTOR	2.00	1730	3	208 440	6.7 3.2	184	E	88406	---	---	---	---	---
1109	PUMP MOTOR	2.00	1730	3	208 440	6.6 3.2	184	E	88407	---	---	---	---	---
1109	PUMP MOTOR	2.00	1730	3	208 220 440	6.7 6.3	184	E	88405	---	---	---	---	---
1109	PUMP MOTOR	2.00	1730	3	208 220 440	6.7 6.3	184	E	88404	---	---	---	---	---
1109	VACUUM PUMP MOTOR	2.00	1740	3	208	14.6	184T	GE4B	89815	---	---	---	---	---

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1109	VACUUM PUMP MOTOR	2.00	1740	3	228	14.6	184T	GE4B	89816	---	---	---	---	---
1109	COOLING BLOWER DRIVE	3.00	1725	3	208	9.0	213	K	89864	---	---	---	---	---
1109	ROTO CONE MOTOR	3.00	1740	3	220	8.4	225	EX	69186	---	---	---	---	---
1109	BLOWER EXHAUST MOTOR	3.00	1740	3	220	8.4	225	EX	69187	---	---	---	---	---
1109	AIR COOLING BLOWER	3.00	1750	3	220	7.6	225	K	78809	---	---	---	---	---
1109	AIR COOLING BLOWER	3.00	1750	3	220	9.0	225	K	89863	---	---	---	---	---
1109	AIR COOLING BLOWER	3.00	1750	3	220	7.6	225	K	89862	---	---	---	---	---
1109	-----	5.00	1000	3	208	18.0	284	---	79192	---	---	---	---	---
1109	ELEVATOR DRIVE MOTOR	5.00	1000	3	208	18.0	284	---	79188	---	---	---	---	---
1109	EXHAUST DRIVE MOTOR	5.00	1740	3	230	13.0	184T	RGZZ	NONE	---	---	---	---	---
1109	EXHAUST DRIVE MOTOR	5.00	1740	3	230	13.0	184T	RGZZ	NONE	---	---	---	---	---
1109	EXHAUST DRIVE MOTOR	5.00	1740	3	230	13.0	184T	RGZZ	NONE	---	---	---	---	---
1109	CONVEYOR MOTOR	---	1725	3	220	7.6	225	---	78807	---	---	---	---	---
1109	COMPRESSOR	---	1800	3	460	76.0	---	---	93442	---	---	---	---	---
1109	COMPRESSOR	---	1800	3	460	76.0	---	---	93443	---	---	---	---	---
1109	COMPRESSOR	---	1800	3	460	76.0	---	---	93442	---	---	---	---	---
1109	COMPRESSOR (2)	---	---	3	440	12.2	---	---	07462	---	---	---	---	---
1109	MIXER MOTOR	---	---	---	---	---	---	---	92998	---	---	---	---	---
1109	CONDENSATE PUMP	---	---	---	---	---	---	---	75527	---	---	---	---	---
1109	REFRIG COMPRESSOR	---	---	---	---	---	---	---	93440	---	---	---	---	---
1109	VACUUM UNIT MOTOR	10.00	3500	3	460	76.0	---	---	93440	---	---	---	---	---
1109	COOL TUNNEL EXHST #4	15.00	1750	3	220	25.0	284	JEX	76353	---	---	---	---	---
1109	COOL TUNNEL EXHST #3	15.00	1750	3	230	39.0	254T	---	NONE	---	---	---	---	---
1109	COOL TUNNEL EXHST #1	15.00	1750	3	230	39.0	254T	---	NONE	---	---	---	---	---
1109	COOL TUNNEL EXHST #2	15.00	1750	3	230	39.0	254T	---	NONE	---	---	---	---	---
1109	KETTLE DRIVE MOTOR	15.00	1760	3	220	38.0	326	EX	75970	---	---	---	---	---
1109	BLOWER	15.00	1770	3	220	38.0	326	EX	75971	---	---	---	---	---
1109	CONDENSATE MOTOR	40.00	1770	3	230	103.5	324T	---	NONE	---	---	---	---	---
1111	MOTOR	.33	1140	3	208	3.2	---	---	64017	---	---	---	---	---
1111	ELEVATOR MOTOR	3.00	1725	3	208	8.4	225	PB	77214	---	---	---	---	---
1111	VARI DRIVE MOTOR	.50	1725	3	208	1.5	56C	P	87314	---	---	---	---	---
1113	VARI DRIVE MOTOR	1.00	1725	3	208	3.0	56C	P	88002	---	---	---	---	---
1113	CHAIN CONVEYOR	2.00	1730	3	208	6.2	184	---	85832	---	---	---	---	---
1113	OH CHAIN CONVEYOR	2.00	1730	3	208	6.0	184	K	89823	---	---	---	---	---
1113	VACUUM MOTOR	25.00	3540	3	220	63.0	324	E	89832	---	---	---	---	---
1113	VACUUM MOTOR	25.00	3540	3	220	63.0	324	E	89830	---	---	---	---	---
1113	VACUUM MOTOR	25.00	3540	3	220	63.0	324	E	89824	---	---	---	---	---
1113	VACUUM MOTOR	30.00	3540	3	208	83.0	286TS	CE4B	88589	---	---	---	---	---
1114	DRIVE MOTOR	.50	1725	3	208	4.0	L56C	P	87315	---	---	---	---	---
1114	VARI DRIVE MOTOR	.50	1725	3	208	---	L56C	P	88005	---	---	---	---	---
1114	EXHAUST FAN MOTOR	.50	1725	1	115	1.8	48	---	NONE	---	---	---	---	---
1114	OH CONVEYOR DRIVE	2.00	1140	3	220	6.4	225	PB	78677	---	---	---	---	---
1114	CHAIN CONVEYOR DRIVE	2.00	1730	3	208	6.4	184	SC	85831	---	---	---	---	---
1114	CHAIN CONVEYOR DRIVE	2.00	1730	3	208	6.0	184	K	89822	---	---	---	---	---
1114	VACUUM MOTOR	25.00	3540	3	220	63.0	324	E	89829	---	---	---	---	---
1114	VACUUM MOTOR	30.00	3540	3	208	83.0	286TS	CE4B	88371	---	---	---	---	---
1114	VACUUM MOTOR	30.00	3540	3	208	83.0	286TS	CE4B	88372	---	---	---	---	---
1114	VACUUM MOTOR	30.00	3540	3	208	83.0	286TS	CE4B	88374	---	---	---	---	---
1122	FAN MOTOR	.50	1730	3	208	4.7	204	---	74298	---	---	---	---	---
1122	CONDENSATE PUMP	1.00	1740	3	220	3.1	203	K	69275	---	---	---	---	---
1124	COOLING TOWER MOTOR	1.00	1730	3	230	3.8	143T	06X	NONE	---	---	---	---	---

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1124	CIRCULATING PUMP	1.00	1735	3	230 460	3.6 1.8	143T		NONE	---	---	---	---	---
1124	COMPRESSOR MOTOR	125.0	1780	3	460	141.	405T	R	NONE	---	---	---	---	---
1124	COMPRESSOR	125.0	1780	3	460	141.	405T	R	NONE	---	---	---	---	---
1127	CONT. FEED PUMP	.50	1725	1	115 230	7.8 3.9	56		NONE	---	---	---	---	---
1127	AIR COMPRESSOR DRIVE	1.00	1725	1	115 230	13.2 6.6	56		NONE	---	---	---	---	---
1127	OVERHEAD HOIST MOTOR	1.50	1760	3	208	4.9	182TDZ	K	NONE	---	---	---	---	---
1127	PRE-COAT PUMP MOTOR	3.00	3505	3	208	10.1	1822	P	NONE	---	---	---	---	---
1127	VERTICAL MOTOR #2	7.50	3450	3	208	23.0	213TP	LU	NONE	---	---	---	---	---
1136	COOLING TOWER MOTOR	.33	1725	1	115 230	6.4 3.2	56		889B3	---	---	---	---	---
1136	CIRCULATING WATER	.50	1725	3	115 208 230	6.8 3.4	G		NONE	---	---	---	---	---
1136	OVERHEAD DOOR #1	.50	1725	1	115	7.8	56C		NONE	---	---	---	---	---
1136	OVERHEAD DOOR #2	.50	1725	1	115	7.8	56C		NONE	---	---	---	---	---
1136	OVERHEAD DOOR #3	.50	1725	1	115	7.8	56C		NONE	---	---	---	---	---
1136	OVERHEAD DOOR #2	.50	1725	1	115	7.8	56C		NONE	---	---	---	---	---
1136	OVERHEAD DOOR #1	.50	1725	1	115	7.8	56C		NONE	---	---	---	---	---
1136	EXHAUST FAN	.50	1725	3	240 460	3.0 1.5	K56	P	89384	---	---	---	---	---
1136	OVERHEAD DOOR #4	.50	1725	1	115	7.8	56C		NONE	---	---	---	---	---
1136	OVERHEAD DOOR #6	.50	1725	1	115	7.8	56C		NONE	---	---	---	---	---
1136	OVERHEAD DOOR #5	.50	1725	1	115	7.8	56C		NONE	---	---	---	---	---
1136	BANDING CUTTER DRIVE	.50	1725	1	115	10.0	MM143TC		NONE	---	---	---	---	---
1136	OH HEATER FAN #3	1.00	855	3	220 440	4.1 2.1	213	E	NONE	---	---	---	---	---
1136	OH HEATER FAN #4	1.00	900	3	208 220 440	4.4 4.1 2.1	213	E	NONE	---	---	---	---	---
1136	HEATER	1.00	900	3	208 440	4.3 2.1	213		NONE	---	---	---	---	---
1136	OH HEATER FAN #2	1.00	900	3	208 220 440	4.4 4.1 2.1	213	E	NONE	---	---	---	---	---
1136	DRY ICE CRUSHER	1.50	1740	3	208 440	4.5 2.1		WCP184	88441	---	---	---	---	---
1136	AIR HANDLER DRIVE	2.00	1735	3	208	6.2	224	K	NONE	---	---	---	---	---
1136	FLOOR CONV DRIVE	2.00	1800	3	208 220 440	7.6 7.5 3.8	14-184-41	VEVEFGM	87383	---	---	---	---	---
1136	FAN MOTOR EXHAUSTER	3.00	1160	3	220 440	9.6 4.8	254	HP1	74812	---	---	---	---	---
1136	COMPRESSOR DRIVE	3.00	1740	3	230 460	9.2 4.6	182T	CE4B	88358	---	---	---	---	---
1136	EXHAUST FAN DRIVE	7.50	1760	3	208 220 440	21.2 10.6	254U	K	89046	---	---	---	---	---
1136	CIRCULATING PUMP	7.50	1760	3	208 220 440	21.2 10.6	254U	K	89045	---	---	---	---	---
1139	AIR COND CONDENSER	.33	825	1	440	1.3			NONE	---	---	---	---	---
1139	CONDENSER FAN MOTOR	.33	825	1	230	2.3	56Z		NONE	---	---	---	---	---
1139	AIR COND CONDENSER	.33	825	1	440	1.3			NONE	---	---	---	---	---
1139	CONDENSER FAN MOTOR	.33	825	1	230	2.3	56Z		NONE	---	---	---	---	---
1139	COOLING TOWER MOTOR	.33	1725	1	115 230	5.4 2.7	E56	RK	NONE	---	---	---	---	---
1139	EXHAUST BLOWER DRIVE	.33	1725	3	230 460	1.5 .8	56		NONE	---	---	---	---	---
1139	EXHAUST FAN MOTOR	.33	1725	1	115 230	5.6 2.8	56Z		88485	115	5.6	8.6*	---	---
1139	COOLING TOWER MOTOR	.33	1725	3	115 208 230	6.4 3.2	56D7		NONE	---	---	---	---	---
1139	HEATER FAN MOTOR	.33	---	1	115	3.4	56-5	SSE	NONE	---	---	---	---	---
1139	CROSS CONVEYOR MOTOR	.50	1725	3	208	3.2	560	P	87264	---	---	---	---	---
1139	OH HEATER FAN MOTOR	.50	1725	1	115	7.6	2356	FH	NONE	---	---	---	---	---
1139	CROSS CONVEYOR	.50	1725	3	208	3.2	560	P	87266	---	---	---	---	---
1139	COOL TWR CIRCUL PUMP	.75	1725	1	115 230	9.2 4.6	H56C	HK	NONE	---	---	---	---	---
1139	CIRCULATING PUMP	.75	1750	3	208	2.4	18207	P	90700	---	---	---	---	---
1139	BLOWER MOTOR	1.00	1725	1	115 230	---	56		NONE	---	---	---	---	---
1139	DRIVE MOTOR	1.50	1730	3	208	7.6	45TC	P	87277	---	---	---	---	---
1139	BLOWER	1.50	1750	3	208 440	4.0 2.0	PM184		NONE	---	---	---	---	---
1139	AIR COND COMPRESSOR	---	---	3	208 440	---	---		NONE	---	---	---	---	---
1139	CRIMPER MOTOR #1A	25.00	1175	3	208 220 440	64.0 32.0	364U	K	87137	---	---	---	---	---

* Active motor but annual hours of operation not known.

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1139	CRIMPING MACHINE	25.00	1175	3	208 220 440	64.0 32.0	364U	K	85927	---	---	---	---	---
1139	CRIMPING MACHINE	25.00	1175	3	208 220 440	64.0 32.0	364U	K	87000	---	---	---	---	---
1139	CRIMPER MOTOR #2A	25.00	1175	3	208 440	64.0 32.0	364U	K	86894	---	---	---	---	---
1139	CRIMPER MOTOR #3A	25.00	1175	3	208 440	64.0 32.0	364U	K	87007	---	---	---	---	---
1139	CRIMPING MACHINE	25.00	1175	3	208 220 440	64.0 32.0	364U	K	86893	---	---	---	---	---
1139	CRIMPING MOTOR #4A	25.00	1175	3	208 220 440	64.0 32.0	364U	K	87136	---	---	---	---	---
1139	CRIMPER MOTOR #5A	25.00	1180	3	208 440	66.0 31.0	364U	---	NONE	---	---	---	---	---
1139	CRIMPING MACHINE	25.00	1180	3	208 220 440	64.0 32.0	364U	K	NONE	---	---	---	---	---
1140	OH HEATER #1	.33	1725	1	115 230	4.8 2.4	R56	---	NONE	---	---	---	---	---
1140	OH HEATER #2	.33	1725	1	115 230	4.8 2.4	R56	---	NONE	---	---	---	---	---
1140	OH DOOR MOTOR	.33	1725	1	115	5.6	56C	---	NONE	---	---	---	---	---
1140	OH HEATER #2	.33	1725	1	115 230	4.8 2.4	R56	---	NONE	---	---	---	---	---
1140	OH DOOR MOTOR	.33	1725	1	115	5.6	56C	---	NONE	---	---	---	---	---
1140	OH DOOR MOTOR	.33	1725	1	115	5.6	56C	---	NONE	---	---	---	---	---
1140	OH HEATER #3	.33	1725	1	115 230	4.8 2.4	R56	---	NONE	---	---	---	---	---
1140	DEHUMIDIFIER REACTI	.33	3545	3	208 220 440	1.5 .8	56	---	NONE	---	---	---	---	---
1140	DEHUMIDIFIER ABSORP	.50	3515	3	208 220 440	1.5 .8	56	---	NONE	---	---	---	---	---
1140	PACE DOWNLOADER	.75	1720	3	230 460	3.6 1.8	6-143-5	VAVLFGD	NONE	---	---	---	---	---
1140	PACE DOWNLOADER	.75	1720	3	230 460	3.6 1.8	6-143-5	VAVLFGD	NONE	---	---	---	---	---
1140	PACE DOWNLOADER	.75	1750	3	230 460	3.1 1.6	143T	AE 4 B	NONE	---	---	---	---	---
1140	PACE DOWNLOADER	.75	1750	3	230 460	3.1 1.6	143T	AE 4 B	NONE	---	---	---	---	---
1140	DOWNLOADER BELT	.75	1800	3	220 440	3.5 1.8	6-56-21	VAVEFGD	86719	---	---	---	---	---
1140	DOWNLOADER BELT	.75	1800	3	220 440	3.5 1.8	6-56-21	VAVEFGD	86708	---	---	---	---	---
1140	DOWNLOADER CONVEYOR	.75	1800	3	220 440	3.5 1.8	6-56-21	VAVEFGD	86716	---	---	---	---	---
1140	DOWNLOADER UP CONVEY	.75	1800	3	220 440	3.5 1.8	6-56-21	VAVEFGD	80717	---	---	---	---	---
1140	DOWNLOADER BELT	.75	1800	3	220 440	3.5 1.8	6-56-21	VAVEFGD	87718	---	---	---	---	---
1140	DOWNLOADER BELT	.75	1800	3	220 440	3.5 1.8	6-56-21	VAVEFGD	90514	---	---	---	---	---
1140	DOWNLOADER BELT	.75	1800	3	220 440	3.5 1.8	6-56-21	VAVEFGD	86709	---	---	---	---	---
1140	VARI DRIVE UNIT	.75	1800	3	220 440	3.5 1.8	6-56-5	VAVEFGD	86710	---	---	---	---	---
1140	DOWNLOADER BELT	.75	1800	3	220 440	3.5 1.8	6-56-5	VAVEFGD	86710	---	---	---	---	---
1140	VARI DRIVE MOTOR	5.00	1750	3	208 220 440	16.3 15.4	7.7 215	AX	86769	---	---	---	---	---
1140	VARI UNIT CONV #3	5.00	1750	3	208 440	16.3 15.4	7.7 215	AX	86770	---	---	---	---	---
1140	VARI UNIT CONV #4	5.00	1750	3	208 440	16.3 15.4	7.7 215	AX	89811	---	---	---	---	---
1140	VARI UNIT CONV #1	5.00	1750	3	208 220 440	16.3 15.4	7.7 215	AX	86772	---	---	---	---	---
1140	VARI DRIVE MOTOR	5.00	1750	3	208 220 440	16.3 15.4	7.7 215	AX	86771	---	---	---	---	---
1145	VACUUM MOTOR	25.00	3540	3	220 440	63.0 31.5	324U	E	89825	---	---	---	---	---
1145	VACUUM MOTOR	30.00	3540	3	208	83.0	286TS	CE4B	88587	---	---	---	---	---
1145	VACUUM MOTOR	30.00	3540	3	208	83.0	286TS	CE4B	88588	---	---	---	---	---
1147	CONDENSATE MOTOR	1.00	1730	3	208 220 440	4.3 2.2	143T	P	NONE	---	---	---	---	---
1199	CONVEYOR DRIVE MOTOR	.75	1725	3	208 220 440	4.4 1.2	7420W	PA	77211	---	---	---	---	---
1199	CONVEYOR DRIVE MOTOR	5.00	1725	3	208	13.7	254	PB	77213	---	---	---	---	---
1199	CONVEYOR DRIVE MOTOR	5.00	1725	3	208	13.7	254	PB	77212	---	---	---	---	---
1202	SUMP PUMP	.33	1725	1	115	10.0	---	---	NONE	---	---	---	---	---
1205	MOTOR	.75	1725	3	208	2.4	---	K	67851	---	---	---	---	---
1205	CENTER SHAKER MOTOR	1.00	1130	3	208	3.6	204	K	04956	---	---	---	---	---
1205	NORTH SHAKER MOTOR	1.00	1130	3	220 440	3.4 1.7	204	K	75273	---	---	---	---	---
1205	SOUTH STOKER MOTOR	1.00	1140	3	220 440	3.4 1.7	204	---	75272	---	---	---	---	---
1205	LIME FEED MOTOR	1.00	1140	3	208	---	246	PG	68944	---	---	---	---	---
1205	LIME MIX MOTOR	1.00	1145	3	208	4.0	224	---	75270	---	---	---	---	---
1205	SUMP MOTOR	1.50	2935	3	220 440	12.8 5.6	203Y	---	72834	---	---	---	---	---
1205	PUMP PIT SHAKER	2.00	---	---	---	---	---	---	36054	---	---	---	---	---
1205	AIR COMPRESSOR MOTOR	3.00	1740	3	220 440	8.8 4.4	225	---	64100	---	---	---	---	---
1205	COAL ELEVATOR MOTOR	5.00	1730	3	208	14.7	254	---	08309	---	---	---	---	---

DAY AND ZIMMERMANN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1205	SPARE MOTOR	5.00	1750	3	208	14.0	254Y	RP	14208	---	---	---	---	---
1205	BACKWASH PUMP MOTOR	5.00	3450	3	208	18.0	225V	K	75284	---	---	---	---	---
1205	CONVEYOR MOTOR	7.50	1735	3	220	2.0	284	K	67400	---	---	---	---	---
1205	STEAM VALVE MOTOR	---	1725	1	115	3.3	---	KH	75235	---	---	---	---	---
1205	STACK FAN MOTOR	15.00	1175	3	220	36.6	18.3	---	75232	---	---	---	---	---
1205	STACK FAN MOTOR	15.00	1175	3	220	36.6	18.3	---	75233	---	---	---	---	---
1205	STACK FAN MOTOR	15.00	1175	3	220	36.6	18.3	---	75234	---	---	---	---	---
1205	FEED PUMP MOTOR	30.00	3535	3	208	42.6	---	CS	19451	---	---	---	---	---
1413	CONDENSATE MOTOR	.50	1735	3	220	440	---	---	41180	---	---	---	---	---
1414	CONDENSER FAN MOTOR	.33	825	1	208	240	---	SC	NONE	---	---	---	---	---
1414	CONDENSER FAN MOTOR	.33	825	1	208	240	---	SC	NONE	---	---	---	---	---
1414	AIR HANDLER MOTOR	1.00	3450	1	115	208	230	RK	NONE	---	---	---	---	---
2106	CONDENSATE PUMP	.75	1550	3	208	220	440	PFU3	NONE	---	---	---	---	---
2106	PUMP MOTOR	2.00	1100	3	220	440	---	---	41057	---	---	---	---	---
2203	PUMP DRIVE MOTOR	.50	3450	1	115	230	---	---	NONE	---	---	---	---	---
3002	EXHAUST FAN MOTOR	.33	1725	1	115	---	---	---	NONE	---	---	---	---	---
3002	AIR HANDLER FAN	5.00	1735	3	230	460	---	FH	000019	---	---	---	---	---
3004	EXHAUST FAN	.33	1725	1	115	---	---	TFS-BE	000027	---	---	---	---	---
3004	SUB SUMP PUMP	.33	---	1	120	---	---	---	NONE	---	---	---	---	---
3004	WATER SEAL PUMP	.50	1725	3	208	440	---	TS	NONE	---	---	8.2	---	---
3004	#1 PUMP	7.50	1745	3	230	460	---	---	001514	---	---	---	---	---
3004	#2 PUMP	7.50	1745	3	230	460	---	---	1515	---	---	---	---	---
3005	CAUSTIC MIX FR MOTOR	.33	1725	1	115	230	---	---	NONE	---	---	---	---	---
3005	PUMP MOTOR	.33	1725	1	115	230	---	---	NONE	---	---	---	---	---
3005	HEATER FAN - N. WEST	.50	1140	3	230	460	---	PC	NONE	---	---	---	---	---
3005	OVERHEAD HEATER FAN	.50	1140	3	230	460	---	PC	NONE	---	---	---	---	---
3005	AIR HANDLER	1.00	1735	3	230	460	---	TDR-BE	000461	---	---	---	---	---
3005	BRINE TANK PUMP	1.00	3510	3	230	460	---	K	NONE	---	---	---	---	---
3005	AIR COMPRESSOR MOTOR	5.00	860	3	230	460	---	DC	NONE	---	---	---	---	---
3005	AIR COMPRESSOR MOTOR	5.00	860	3	230	460	---	P	NONE	---	---	---	---	---
3005	CIRCULATING FAN	5.00	1735	3	230	460	---	---	NONE	---	---	---	---	---
3005	FUEL OIL PUMP #2	5.00	1745	3	230	460	---	---	NONE	---	---	---	---	---
3005	FUEL OIL PUMP #1	5.00	1745	3	230	460	---	---	NONE	---	---	---	---	---
3005	#1 BOILER BLOWER	10.00	1725	3	208	220	440	---	184T	---	---	---	---	---
3005	BOILER BLOWER	10.00	1725	3	208	220	440	---	184T	---	---	---	---	---
3005	FIRE PROTECTION PUMP	100.0	1780	3	208	220	440	---	2852	---	---	---	---	---
3005	AIR COMPRESSOR #2	125.0	585	3	220	440	---	---	2852	---	---	---	---	---
3005	AIR COMPRESSOR #1	125.0	585	3	220	440	---	---	2852	---	---	---	---	---
3005	SOFT WATER PUMP #2	15.00	3505	3	460	---	---	---	000423	---	---	---	---	---
3005	SOFT WATER PUMP #1	15.00	3505	3	460	---	---	---	000422	---	---	---	---	---
3005	SOFT WATER SUPPLY #1	20.00	3515	3	460	---	---	---	000418	---	---	---	---	---
3005	SOFT WATER SUPPLY #2	20.00	3515	3	460	---	---	---	000409	---	---	---	---	---
3005	DEMINERALIZED #1	30.00	3530	3	460	---	---	---	000417	---	---	---	---	---
3005	DEMINERALIZED #2	30.00	3530	3	460	---	---	---	000416	---	---	---	---	---
3005	BOILER FEED PUMP	50.00	3545	3	230	460	---	---	000421	---	---	---	---	---
3006	DOALL SAW OIL PUMP	.33	3450	3	220	440	---	---	000415	---	---	---	---	---
3006	OVERHEAD DOOR DRIVE	.50	1725	1	115	---	---	---	000454	---	---	---	---	---
3006	PIPE THREADER MOTOR	.50	14000	1	115	---	---	---	NONE	---	---	---	---	---
3006	PIPE MACHINE DRIVE	.50	14000	1	115	---	---	---	NONE	---	---	---	---	---
3006	LATHE	.75	1725	3	208	440	---	---	95381	---	---	---	---	---
3006	BENCH GRINDER	.75	3450	1	115	230	---	---	95375	---	---	---	---	---
3006	DRILL PRESS MOTOR	1.00	1720	3	220	440	---	---	000033	---	---	---	---	---
									NONE	---	---	---	---	---
									093030	---	---	---	---	---

* Active motor but annual hours of operation not known.

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
3006	DOALL SAW MOTOR	1.00	1725	1	115 208 230	13.0	6.5	---	L56	---	---	---	---	---
3006	FAN FOR PAINT BOOTH	1.00	1730	3	208 440	3.2	1.6	---	182	---	---	---	---	---
3006	GRINDER MOTOR	1.00	1750	3	460	2.0	---	---	---	---	---	---	---	---
3006	GRINDER MOTOR	1.00	1750	3	460	2.0	---	---	---	---	---	---	---	---
3006	#3 EXHAUSTION FAN	1.50	1725	3	220 440	6.2	3.1	---	---	---	---	---	---	---
3006	#1 EXHAUSTION FAN	1.50	1725	3	220 440	6.2	3.1	---	---	---	---	---	---	---
3006	#2 EXHAUSTION FAN	1.50	1725	3	220 440	6.2	3.1	---	---	---	---	---	---	---
3006	DOALL SAW DRIVE	1.50	---	3	208 220 440	5.8	4.8	4.6	184	---	---	---	---	---
3006	COIL COOLING FAN	2.00	1735	3	---	6.0	3.0	---	---	---	---	---	---	---
3006	GRINDER MOTOR	2.00	1750	3	230 460	3.4	---	---	---	---	---	---	---	---
3006	SHAFT DRIVE MOTOR	3.00	1725	3	220 440	12.0	11.4	6.0	---	---	---	---	---	---
3006	DRIVE MOTOR	3.00	1750	3	220 440	26.0	25.0	13.5	---	---	---	---	---	---
3006	LATHE - 16'	5.00	1460	3	220 440	15.6	7.8	---	---	---	---	---	---	---
3006	AIR HANDLER MOTOR	5.00	1745	3	230 460	14.6	7.3	---	---	---	---	---	---	---
3006	COIL COOL FAN CONDENS	7.50	1730	3	---	20.0	10.0	---	---	---	---	---	---	---
3006	AIR HANDLER MOTOR	7.50	1730	3	230 460	21.0	10.5	---	---	---	---	---	---	---
3007	GAS PUMP MOTOR	.33	1725	1	115 230	7.2	3.6	---	---	---	---	---	---	---
3007	STORES	.50	1720	3	208 220 440	2.8	2.6	1.3	56-6	---	---	---	---	---
3007	DECARBON PUMP MOTOR	.50	1725	3	230 460	2.2	1.1	---	---	---	---	---	---	---
3007	PUMP MOTOR	.50	1790	3	460	1.9	---	---	---	---	---	---	---	---
3007	AUTO CLAVE PUMP MTR	.50	1790	3	---	1.9	---	---	---	---	---	---	---	---
3007	PUMP MOTOR	.50	1790	3	460	1.9	---	---	---	---	---	---	---	---
3007	PUMP MOTOR	.50	1790	3	460	1.9	---	---	---	---	---	---	---	---
3007	HOT WATER HEATER MTR	.50	1790	3	230 460	2.0	1.0	---	---	---	---	---	---	---
3007	CENTRIFUGAL PUMP MTR	.50	3450	3	230 460	1.9	1.0	---	---	---	---	---	---	---
3007	HOT WATER HEATER MTR	.50	3450	3	230 460	2.0	1.0	---	---	---	---	---	---	---
3007	MIXER GEAR HEAT MTR	.75	1785	3	460	2.1	---	---	---	---	---	---	---	---
3007	VENT FAN MOTOR	1.50	1725	3	230 460	4.3	2.2	---	---	---	---	---	---	---
3007	VENT FAN MOTOR	1.50	1725	3	230 460	4.3	2.2	---	---	---	---	---	---	---
3007	VENT FAN MOTOR	1.50	1725	3	230 460	4.3	2.2	---	---	---	---	---	---	---
3007	STORE	1.50	1755	3	460	2.5	---	---	---	---	---	---	---	---
3007	PUMP MOTOR	1.50	1755	3	460	2.5	---	---	---	---	---	---	---	---
3007	PUMP MOTOR	1.50	1755	3	460	2.5	---	---	---	---	---	---	---	---
3007	MOTOR	3.00	1745	3	460	4.6	---	---	---	---	---	---	---	---
3007	GEAR REDUCTION MOTOR	3.00	1745	3	460	4.3	---	---	---	---	---	---	---	---
3007	GEAR REDUCTION MOTOR	3.00	1745	3	460	4.6	---	---	---	---	---	---	---	---
3007	MOTOR	3.00	1745	3	460	4.6	---	---	---	---	---	---	---	---
3007	GEAR REDUCTION MOTOR	3.00	1745	3	460	4.3	---	---	---	---	---	---	---	---
3007	GEAR REDUCTION MOTOR	3.00	1745	3	460	4.6	---	---	---	---	---	---	---	---
3007	HYDRAULIC PUMP MOTOR	5.00	1200	3	220 440	15.3	7.9	---	---	---	---	---	---	---
3007	PUMP MOTOR	5.00	1200	3	220 440	15.8	7.9	---	---	---	---	---	---	---
3007	PUMP MOTOR	5.00	1200	3	220 440	15.8	7.9	---	---	---	---	---	---	---
3007	BLOWER MOTOR	5.00	1730	3	230 460	13.6	6.8	---	---	---	---	---	---	---
3007	MOTOR	5.00	1740	3	440	7.0	---	---	---	---	---	---	---	---
3007	MOTOR-CONVEYOR DRIVE	5.00	1790	3	230 460	5.8	2.9	---	---	---	---	---	---	---
3007	MOTOR	5.00	3485	3	460	7.0	---	---	---	---	---	---	---	---
3007	MOTOR	5.00	3485	3	230 460	14.0	7.0	---	---	---	---	---	---	---
3007	PUMP MOTOR	5.00	3485	3	230 460	14.0	7.0	---	---	---	---	---	---	---
3007	MOTOR	5.00	3485	3	230 460	14.0	7.0	---	---	---	---	---	---	---
3007	MOTOR	7.50	1760	3	460	10.5	---	---	---	---	---	---	---	---
3007	MOTOR	7.50	1760	3	460	10.5	---	---	---	---	---	---	---	---
3007	PUMP MOTOR	10.00	3510	3	460	12.0	---	---	---	---	---	---	---	---

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER	AN HRS	AN COST
3007	PUMP MOTOR	10.00	3560	3	460	12.0	215T	P	000168	---	---	---	---	---
3007	PUMP MOTOR	50.00	1800	3	460	59.3	365UP	JU	29151	---	---	---	---	---
3008	TRANSFER FAN	.50	1725	3	230 460	2.8	856	P	NONE	---	---	---	---	---
3008	EXHAUST FAN #2	3.00	1745	3	460	4.6	182T	P	000443	---	---	---	---	---
3008	EXHAUST FAN	5.00	1740	3	230 460	6.8	184T	P	000444	---	---	---	---	---
3008	AGITATOR MOTOR	7.50	1785	3	460	2.1	182TC	P	000439	---	---	---	---	---
3008	LEAD KILL TANK AGITA	7.50	1785	3	460	2.1	182TC	P	NONE	---	---	---	---	---
3010	PUMP	.50	3450	3	230 460	1.9	48	---	000134	---	---	---	---	---
3010	AIR HANDLER	1.00	1725	3	230 460	3.4	143T	TFR-BE	000474	---	---	---	---	---
3012	AIR HANDLER	.75	1785	3	460	2.1	182T	P	000089	---	---	---	---	---
3012	AGITATOR MOTOR	.75	1785	3	460	2.1	182TC	P	NONE	---	---	---	---	---
3012	EXHAUST FAN MOTOR	2.00	1725	3	460	3.1	182T	P	NONE	---	---	---	---	---
3014	HOPPER MOTOR	.50	1720	3	208 440	2.8	56-6	JF-GW	000818	---	---	---	---	---
3014	PACK HOUSE KILL TANK	.75	1785	3	460	2.1	182TC	P	001574	---	---	---	---	---
3014	AIR HANDLER	2.00	1715	3	230 460	5.8	145T	TER-BE	000868	---	---	---	---	---
3014	EXHAUST FAN	3.00	1745	3	460	4.6	182T	P	000825	---	---	---	---	---
3014	SAW DUST BLOWER MTR	5.00	1730	3	230 460	13.6	184T	T	NONE	---	---	---	---	---
3015	CIRCULATING PUMP	.50	3450	3	230 460	2.0	---	P	000507	---	---	---	---	---
3015	PUMP MOTOR	.50	3450	3	230 460	2.0	---	P	000521	---	---	---	---	---
3015	SODIUM NITRITE FEED	.75	1785	3	460	2.1	182T	P	000585	---	---	---	---	---
3015	PREPRA AREA KILL TANK	.75	1785	3	460	2.1	182TC	P	001568	---	---	---	---	---
3015	SODA ASH FEED PUMP N	.75	1785	3	460	2.1	182T	P	000589	---	---	---	---	---
3015	SODIUM NITRATE PUMP	.75	1785	3	460	2.1	182T	P	000589	---	---	---	---	---
3015	SODIUM NIT TANK AGIT	1.00	1165	3	460	1.8	182TC	P	001566	---	---	---	---	---
3015	SODA ASH TRANS MOTOR	1.00	1780	3	460	2.2	182T	P	000587	---	---	---	---	---
3015	SODA ASH SOLE MIX	1.50	1155	3	460	2.5	182TC	P	001567	---	---	---	---	---
3015	SERV AREA SUP FAN	3.00	1730	3	230 460	8.4	182T	TFS-BE	000867	---	---	---	---	---
3015	PREPRA AREA SUP FAN	3.00	1745	3	460	4.6	182T	P	000812	---	---	---	---	---
3015	PUMP-PRECIP WEST BAY	5.00	1200	3	220 440	15.8	AVE-254U	000-398	000566	---	---	---	---	---
3015	HYDRAULIC PUMP MOTOR	5.00	1200	3	220 440	15.8	AVE-254U	000-398	000565	---	---	---	---	---
3015	PUMP-PRECIP EAST BAY	5.00	1200	3	220 440	15.8	AVE-254U	000-39	000564	---	---	---	---	---
3015	TROLLEY CAR MOTOR	5.00	1590	3	230 460	5.8	182T	D	NONE	---	---	---	---	---
3015	LEAD ACETATE MIX TANK	5.00	1740	3	460	6.8	184T	P	000859	---	---	---	---	---
3015	LEAD AZIDE TRANSFER	5.00	3485	3	460	7.0	184T	P	000511	---	---	---	---	---
3015	PREPRA AREA SUP FAN	7.50	1760	3	460	10.5	213T	P	000813	---	---	---	---	---
3015	PRECIP AREA EXHAUST	7.50	1760	3	460	10.5	213T	P	000810	---	---	---	---	---
3015	LEAD ACETATE FEED	7.50	3505	3	460	10.3	213T	P	000518	---	---	---	---	---
3015	LEAD ACETATE FEED	7.50	---	3	460	12.0	215T	P	000523	---	---	---	---	---
3015	PUMP MOTOR	10.00	3510	3	460	12.0	215T	P	000522	---	---	---	---	---
3015	COOL PUMP TO TWR H2O	10.00	3510	3	460	7.8	56	---	NONE	---	---	---	---	---
3016	EXHAUST FAN MOTOR #2	.33	1725	1	115 220	3.9	56	---	NONE	---	---	---	---	---
3016	EXHAUST FAN MOTOR #3	.33	1725	1	115 230	5.6	56	---	NONE	---	---	---	---	---
3016	EXHAUST FAN MOTOR #4	.33	1725	1	115 230	5.6	56	---	NONE	---	---	---	---	---
3016	ADD MIX TANK AGITATOR	.50	1725	3	230 460	3.0	L56C	P	001164	---	---	---	---	---
3016	PRECOAT MIX TANK AGIT	.50	1725	3	230 460	3.0	L56C	P	001160	---	---	---	---	---
3016	FLUID PUMP DRIVE	.50	1790	3	460	1.9	182TY	P	001106	---	---	---	---	---
3016	PUMP	.50	1790	3	460	1.9	182TY	P	001109	---	---	---	---	---
3016	EXHAUST FAN MOTOR	.50	1790	3	460	1.9	182T	P	NONE	---	---	---	---	---
3016	ROLL UP DOOR	.75	345	3	230 460	2.7	56C	M	NONE	---	---	---	---	---
3016	SOUTH DOOR MOTOR	.75	345	3	230 460	2.5	56C	M	NONE	---	---	---	---	---
3016	SOD NITRITE TANK AGIT	1.00	1160	3	230 460	3.8	184	CIXC	001239	---	---	---	---	---
3016	EXHAUST FAN MOTOR	1.00	1725	3	230 460	3.6	TD56	FS	NONE	---	---	---	---	---

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
3016	EXHAUST FAN MOTOR	1.00	1725	3	230 460	3.6 1.8	TD56	FS	NONE	---	---	---	---	---
3016	EXHAUST FAN MOTOR	1.00	1725	3	230 460	3.6 1.8	TD56	---	NONE	---	---	---	---	---
3016	PUMP	1.00	1735	3	230 460	4.4 2.2	143T	P	000143	---	---	---	---	---
3016	PUMP MOTOR	1.00	1780	3	460	2.2	182T	P	001196	---	---	---	---	---
3016	ADD MIX PUMP DRIVE	1.00	1780	3	460	2.2	182T	P	001161	---	---	---	---	---
3016	EXHAUST FAN MOTOR	1.00	1780	3	460	2.2	182T	---	NONE	---	---	---	---	---
3016	#1 EXHAUST FAN MOTOR	1.00	1780	3	460	2.2	182T	P	NONE	---	---	---	---	---
3016	AIR HANDLER MOTOR	1.50	1725	3	460	2.5	286T	P	NONE	---	---	---	---	---
3016	SOD AZD MIX TANK AGIT	1.50	1730	3	230 460	5.6 2.8	145	P	001214	---	---	---	---	---
3016	A/C DROWNING TANK	1.50	1735	3	460	2.5	182T	P	001114	---	---	---	---	---
3016	A/C DROWN TANK PUMP	1.50	1755	3	460	2.5	182T	P	001240	---	---	---	---	---
3016	EXHAUST FAN MOTOR	1.50	1755	3	460	2.5	182T	P	001115	---	---	---	---	---
3016	AIR HANDLER MOTOR	1.50	1755	3	460	2.5	182T	P	000148	---	---	---	---	---
3016	NORTH PUMP MOTOR	1.50	1755	3	460	2.5	182T	P	NONE	---	---	---	---	---
3016	OVERHEAD HOIST	1.50	1800	3	220 440	4.8 2.3	182T	P	001240	---	---	---	---	---
3016	OVERHEAD HOIST	1.50	1800	3	220 440	4.8 2.3	E86	L	001244	---	---	---	---	---
3016	C.M.C. HEELS TRANSF	1.50	3530	3	460	2.6	182T	P	001226	---	---	---	---	---
3016	EXHAUST FAN MOTOR	2.00	1755	3	460	3.1	182T	P	NONE	---	---	---	---	---
3016	2ND CLEAR LIQUID STO	2.00	3520	3	460	5.8	182T	P	001204	---	---	---	---	---
3016	#2 MOTHER LIQUOR STO	2.00	3520	3	460	5.8	182T	P	001201	---	---	---	---	---
3016	#1 MOTHER LIQUOR STO	2.00	3520	3	460	5.8	182T	P	001199	---	---	---	---	---
3016	AIR HANDLER MOTOR	3.00	1725	3	460	4.6	286T	P	NONE	---	---	---	---	---
3016	PROCESS CONDENSE PUMP	3.00	1745	3	460	4.6	182T	P	001187	---	---	---	---	---
3016	AUTOCALVE AGITATOR	3.00	1745	3	460	4.6	182T	P	001107	---	---	---	---	---
3016	ANALYSIS #1	3.00	3505	3	460	4.6	182T	P	001143	---	---	---	---	---
3016	C.M.C. SOLN. STG. #1	3.00	3505	3	460	4.6	182T	P	001229	---	---	---	---	---
3016	ANALYSIS #2	3.00	3505	3	460	4.6	182T	P	001144	---	---	---	---	---
3016	C.M.C. SOLN. STG. #2	3.00	3505	3	460	3.6	182T	P	001228	---	---	---	---	---
3016	PRODUCT SOLUTION	3.00	3505	3	460	4.6	182T	P	001195	---	---	---	---	---
3016	PROD SOLUTION PUMP	3.00	3505	3	460	4.6	182T	P	001140	---	---	---	---	---
3016	SODIUM AZIDE TRANS	3.00	3505	3	460	4.6	182T	P	001216	---	---	---	---	---
3016	PUMP MOTOR	3.00	3505	3	460	4.6	182T	---	---	---	---	---	---	---
3016	PUMP DRIVE	5.00	1165	3	230 460	16.0 8.0	215T	P	000865	---	---	---	---	---
3016	PUMP DRIVE	5.00	1165	3	230 460	16.0 8.0	215T	P	000866	---	---	---	---	---
3016	#2 EVAPORATOR AGITAT	5.00	1740	3	460	6.8	184T	P	001177	---	---	---	---	---
3016	HN03 TANK UNLOADING	5.00	1740	3	230 460	13.6 6.8	184T	P	NONE	---	---	---	---	---
3016	HN03 TRANSFER PUMP	5.00	1740	3	230 460	13.6 6.8	184T	PM	NONE	---	---	---	---	---
3016	HEELS TANK AGITATOR	5.00	1740	3	460	6.7 2.3	215	P	001223	---	---	---	---	---
3016	#1 EVAPORATOR AGITAT	5.00	1740	3	460	6.8	184T	P	001168	---	---	---	---	---
3016	AIR COMPRESSOR DRIVE	5.00	1740	3	230 460	13.6 6.8	184T	P	001124	---	---	---	---	---
3016	UNLOADING PUMP	5.00	1740	3	230 460	13.6 6.8	184T	P	000146	---	---	---	---	---
3016	AUTOCALVE MOTOR	5.00	1745	3	460	4.6	182T	P	001338	---	---	---	---	---
3016	AL. TK. UNLOAD PUMP	5.00	3525	3	460	7.0	213	P	000152	---	---	---	---	---
3016	TRANSFER PUMP MOTOR	5.00	3525	3	440	7.0	213	P	000151	---	---	---	---	---
3016	SULFURIC ACID PUMP	5.00	---	3	230 460	13.6 6.8	184T	P	000145	---	---	---	---	---
3016	AMMONIA ABSORBER	7.50	1760	3	460	10.5	213T	P	001151	---	---	---	---	---
3016	AIR HANDLER MOTOR	7.50	1760	3	460	10.5	213T	P	001254	---	---	---	---	---
3016	NH3 COMPRESSOR	7.50	1760	3	230 460	21.0 10.5	213T	P	000140	---	---	---	---	---
3016	AIR HANDLER MOTOR	7.50	1760	3	460	10.5	213T	P	001260	---	---	---	---	---
3016	OIL PUMP MOTOR	10.00	1725	3	220 440	28.0 14.0	---	---	NONE	---	---	---	---	---
3016	KILL TANK #1 AGITAT	10.00	1750	3	460	12.6	215T	---	001234	---	---	---	---	---

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

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3016	KILL TANK #2 AGITAT	10.00	1750	3	460	12.8	215T		001236					
3016	ELECTRIC PLANT	10.00	1800	1	115 230	54.4			000092					
3016	STRIPPED LIQUOR STOR	10.00	3510	3	460	12.0	215T	P	001157					
3016	AIR HANDLER MOTOR	15.00	1765	3	460	19.5	254T	P	001253					
3016	10% SOLN. STG. #3 E.	15.00	3515	3	460	19.0	254T	P	001210					
3016	10% SOLN. STG. #1	15.00	3515	3	460	19.0	254T	P	001212					
3016	HYDRAULIC PUMP DRIVE	20.00	1160	3	460	26.0	286T	P	NONE					
3016	AIR HANDLER MOTOR	25.00	1770	3	230 460	66.0	284T		NONE					
3016	OIL PUMP DRIVE NORTH	30.00	3515	3	460	37.0	286TS	P	001132					
3016	OIL PUMP DRIVE SOUTH	30.00	3515	3	460	37.0	286TS	P	001129					
3016	AIR HANDLER	50.00	1770	3	230 460	116.0	236T	TFS-RE	001293					
3017	EXHAUST FAN DRIVE	.75	1725	1	115 208	10.8	H56	K	NONE					
3017	PUMP MOTOR	7.50	1760	3	460	10.5	213T	P	000877					
3017	PUMP MOTOR	7.50	1760	3	460	10.5	213T	P	000878					
3017	BRINE CIRCULAT PUMP	7.50	3505	3	460	10.5	213T	P	000886					
3017	#1 SOD REFRIG MACH	100.0	1775	3	460	114.	405T6	P	000873					
3017	#2 SOD REFRIG MACH	100.0	1775	3	460	114.	406T6	P	000874					
3017	LED AZD COOL TWR #1	25.00	3600	3	460	30.1	324UPH	JU	NONE					
3017	LED AZD COOL TWR #2	25.00	3600	3	460	30.1	324UPH	JU	NONE					
3017	LEAD AREA REFRIG	40.00	1770	3	460	50.0	324T	P	000885					
3017	PUMP MOTOR	40.00	3545	3	460	50.0	324TS	P	000883					
3017	PUMP MOTOR	40.00	3545	3	460	50.0	324TS	P	USA 884					
3017	SOD AZD COOL TWR PMP	50.00	1800	3	460	59.3	365UP	JU	NONE					
3018	#1 SODIUM COOLING	15.00	1730	3	230 460	35.0			000900					
3019	FAN MOTOR	15.00	1750	3	230 460	35.0			000900					
3020	FAN MOTOR	7.50	1750	3	230 460	19.0			000903					
3021	FAN REF. MOTOR	.33	1625	1	230	1.6			000092					
3022	FAN REF. MOTOR	.33	1625	1	230	1.6			000091					
3032	LIQUID NITROGEN PUMP	1.50	1275	3	230 460	6.8	3.4	VM1452	NONE					

APPENDIX E

ACTIVE MOTORS SORTED BY INCREASING ANNUAL ELECTRICITY COST -
BUILDING NUMBERS BELOW 999

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
203	HIGH SPEED GRINDER	---	30000	1	115	2.5	---	---	ST280	115	2.5	1.7	100	1
202	RIVET SET	.33	1725	1	115	5.6	562	S	78046	115	5.6	5.1	50	1
207	BRICK SAW MOTOR	1.50	3450	1	115	18.2	56	---	92595	230	9.1	5.3	50	1
106	BENCH GRINDER	.33	3450	1	115	4.2	320C	---	NONE	115	4.2	3.0	50	1
202	WATER COOLER	---	---	1	115	4.2	---	---	092079	115	4.2	3.5	50	1
247	WATER COOLER	---	---	1	115	4.0	---	---	87457	115	4.0	2.9	100	1
202	OSCILLATING FAN	---	---	1	115	0.7	---	---	96196	115	0.7	0.9	100	1
202	BORING BAR	.50	3450	1	115	6.0	---	---	68899	115	6.0	8.6	50	1
203	WATER COOLER MOTOR	---	---	1	115	3.4	---	---	65475	115	3.4	2.3	100	1
202	OSCILLATING FAN	---	---	1	110	0.7	---	---	083700	115	0.7	0.9	100	1
202	BENCH GRINDER	.50	3450	1	110	1.3	---	---	45042	115	1.2	1.9	100	1
202	BENCH GRINDER	.33	3450	1	115	4.1	---	---	67174	115	4.1	3.9	50	1
202	OSCILLATING FAN	---	---	1	110	0.7	---	---	083625	115	0.7	0.9	100	1
052	BENCH GRINDER	.33	1000	1	110	4.6	---	K	12747	115	4.6	3.6	100	2
104	CONDENSATE PUMP	.75	3450	3	208	2.8	56	---	97902	208	2.8	1.8	100	2
203	BALDOR GRINDER	.50	3450	1	115	4.8	153C	---	71999	115	4.8	3.3	100	2
324	GRINDER	.50	3450	1	115	5.0	---	---	87488	115	5.0	5.0	100	2
203	PEDESTAL GRINDER	.50	3450	3	220	4.40	153M	---	74199	208	1.5	0.7	100	2
053	TENSILE TEST MACHINE	.33	1725	1	115	230	656C	KFU3	93550	115	6.4	2.6	100	2
202	HONING MACHINE	.50	1725	1	115	230	56	---	97394	115	8.8	7.5	50	2
203	ROCKWELL DRILL PRESS	.50	1725	3	230	460	---	510M	089692	208	1.8	1.0	100	2
324	GRINDER	.33	3450	1	115	5.3	---	---	90590	115	5.3	4.5	100	2
053	CONDENSATE PUMP	.50	1735	3	208	416	---	---	45511	208	1.6	0.6	200	2
207	B JOINTER	1.00	3450	3	200	---	C56	TF	98368	208	3.6	2.7	50	2
736	AIR HANDLER MOTOR	.50	1735	3	208	---	---	---	74203	208	1.6	1.1	104	2
951	CONVEYOR DRIVE MOTOR	.33	1725	3	220	---	ZP	FS	26930	208	1.4	1.3	100	2
203	AIR COND FAN MOTOR	.33	1100	1	208	230	DU48	FLL	96479	230	1.5	1.4	200	2
202	BENCH GRINDER	.50	3450	3	208	---	---	VHA	13174	208	1.6	1.0	100	2
202	WATER COOLER	---	---	1	115	4.0	---	---	83511	115	4.0	3.5	100	2
203	GRINDER BUFFER	.50	3450	1	115	5.0	5324C	---	089243	115	5.0	2.7	100	2
203	BUFFER/MOTOR	.50	3450	1	115	5.0	5324C	---	89244	115	5.0	2.4	100	2
202	DRILL PRESS	.50	1140	3	208	---	75D	K	75364	208	1.9	1.5	100	2
951	CIRCULATING PUMP MTR	.50	1725	3	208	440	35	TA	69316	208	1.4	1.5	100	2
203	PEDESTAL GRINDER	.33	3600	1	115	4.5	---	K	19659	115	4.5	3.2	100	2
243	WATER COOLER	---	---	1	115	4.0	---	---	70833	115	4.0	3.6	100	2
203	DRILL PRESS	.33	1740	3	220	---	---	---	45543	208	1.3	1.0	100	2
202	FORKLIFT HOIST	1.50	1725	3	208	230	56C	PAB8	97910	208	5.0	3.1	50	2
203	WATER COOLER MOTOR	---	---	1	115	4.0	---	---	65449	115	4.0	3.5	100	2
203	AIR CONDITIONER	---	---	1	208	230	---	---	96478	208	9.3	1.8	100	2
207	BENCH GRINDER	.50	3450	1	115	4.8	153C	---	71998	115	4.8	3.5	100	2
253	SUMP PUMP MOTOR	.33	---	1	115	---	---	---	NONE	115	---	---	---	3
203	GRINDER/MOTOR	1.00	3500	3	208	220	56R	---	97892	208	2.7	7.5	100	3
058	CONDENSATE PUMP	.75	3450	3	208	230	56	---	95133	208	2.6	1.2	200	3
202	DRILL PRESS	.33	1740	3	230	---	115	---	04547	208	---	---	---	3
207	BENCH GRINDER	.50	3450	1	115	5.8	D56Y	KN	092148	115	5.8	4.3	100	3
202	DRILL PRESS	.50	1725	1	115	230	118G	K.B.	46110	115	7.6	6.1	100	3
203	TRENT MOTOR OVEN	1.00	1725	3	208	220	56C2	---	95151	208	3.0	1.7	50	3
053	OVERHEAD HEATER	.50	1075	1	115	230	K56	CC	275395	115	5.8	5.8	100	3
909	CONDENSATE PUMP	.75	1750	3	220	440	RSS72	QZ	NONE	208	2.6	1.1	200	3
102	SUMP PUMP	.33	1725	1	115	---	---	---	NONE	115	10.0	7.0	100	3
058	SUMP PUMP	.33	1725	1	115	---	---	---	NONE	115	10.0	6.5	100	3
057	CONDENSATE PUMP	.50	1725	3	208	416	---	---	---	208	1.6	1.0	200	3

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
106	CONDENSATE PUMP	.75	3450	3	230 460	2.4	1.2	---	NONE	208	2.7	2.5	100	3
202	DELTA DRILL PRESS	.33	1725	1	110	6.3	---	SS	79153	115	6.0	5.5	100	3
203	BENCH GRINDER	.33	3450	1	115	6.2	---	CR200	68028	115	6.2	5.9	100	3
203	AIR HANDLER	.50	1725	1	115 230	7.0	3.5	---	8942	115	7.0	4.3	100	3
052	CONDENSATE PUMP	.75	3450	3	208 220 440	2.5	1.3	---	PFV3	208	2.5	1.2	200	3
053	OVERHEAD HEATER	.50	1075	1	115 230	5.8	2.9	CC	275397	115	5.8	5.7	100	3
105	CONDENSATE PUMP	.75	3450	3	208 230 460	2.6	1.3	---	---	208	2.6	1.2	250	3
203	HEATER MOTOR	.50	1725	1	115 230	7.0	3.5	---	8943	115	7.0	5.2	100	3
053	TENSILE TEST MACHINE	.75	1725	3	230 460	3.0	1.5	---	94551	208	3.0	2.1	100	3
203	DRILL PRESS	.50	1760	3	220 440	2.0	1.0	---	74642	208	2.1	1.4	100	3
203	LATHE MOTOR	.50	1725	3	208 220 440	1.7	0.8	FS	74640	208	1.7	1.3	200	3
203	DELTA DRILL PRESS	.75	1725	3	220 440	2.2	1.1	PA	79537	208	2.3	1.5	100	3
102	PAPER PUNCH	.33	1725	1	115	6.2	---	SPS	089852	115	6.2	6.0	100	3
715A	ROCKWELL DRILL PRESS	.50	1725	3	230 460	1.6	.8	---	89694	208	1.6	1.1	246	3
203	DRILL PRESS	.50	1075	1	115 230	5.8	2.9	---	90598	115	5.8	3.2	100	3
053	OVERHEAD HEATER	.50	1075	1	115 230	5.8	2.9	CC	NONE	115	5.8	5.9	100	3
262	ICE CRUSHER	.50	1725	1	115	6.8	---	SPS	06558	115	6.8	---	---	---
203	MILLING MACH COOLANT	---	---	---	---	---	---	---	97815	---	---	0.3	1000	3
209	SUMP PUMP MOTOR	.33	1725	1	115	10.0	---	---	NONE	115	10.0	5.8	100	3
203	CONDENSATE PUMP	.75	3450	3	208 220 440	2.5	1.3	---	95126	208	2.5	1.9	100	3
505	SUMP PUMP MOTOR	.33	1725	1	115	8.0	---	---	SP 006	115	8.0	7.9	100	4
105	SUMP PUMP	.33	1750	1	110	10.0	---	---	NONE	115	9.6	8.0	100	4
203	DUMORE HIGH SP DRILL	---	17000	1	115	8.0	---	---	7986	115	8.0	0.5	100	4
106	SUMP PUMP	.33	1725	1	115	10.0	---	---	NONE	115	10.0	8.0	100	4
104	SUMP PUMP	.33	1725	1	115	10.0	---	---	NONE	115	10.0	8.5	100	4
057	SUMP PUMP	.33	1725	1	115	10.0	---	---	A771E	115	10.0	8.6	100	4
203	VACUUM PUMP	.50	1725	1	115 230	8.4	4.2	---	NONE	115	8.4	8.2	100	4
231	SEWING MACHINE	---	1725	1	110	5.0	---	---	97812	115	4.8	2.3	200	4
203	COIL WINDER	.50	1725	1	110 220	8.8	4.4	---	B-LINE	115	8.4	8.7	100	4
202	SUMP PUMP	.33	1725	1	115	10.0	---	---	62474	115	10.0	8.5	100	4
203	DISC SANDER	.50	1725	1	115 230	8.6	4.3	---	91041	115	8.6	4.5	100	4
203	PORTABLE PIPE THREAD	1.00	---	1	110	15.0	---	---	090689	115	14.4	9.4	100	4
513	SUMP PUMP	.33	1725	1	115	10.0	---	---	---	115	10.0	8.6	100	4
202	AIR CONDITIONER	---	---	---	---	---	---	---	90027	---	---	8.6	100	4
904	BANDING CUTTER	.33	1800	1	115 230	4.6	2.3	---	90540	115	4.6	4.1	200	4
202	AIR CONDITIONER	---	---	---	---	---	---	---	89965	115	---	9.5	100	4
202	AIR CONDITIONER	---	---	---	---	---	---	---	9002	---	---	---	---	---
114	SUMP PUMP	.33	1750	1	110	10.0	---	---	NONE	115	9.7	8.2	100	4
202	FLOOR HEATER	1.50	1740	3	220 440	4.6	2.3	---	66474	208	4.9	3.7	100	4
162	SUMP PUMP	.33	1725	1	115	10.0	---	---	NONE	115	10.0	8.0	100	4
203	G.E. BUFFER	1.00	1720	3	220 440	3.2	1.6	---	---	208	3.4	2.0	100	5
202	OVERHEAD HEATER	.75	1725	1	115 230	10.0	5.0	---	M	208	10.0	5.5	100	5
715A	BAND SAW	.50	1725	3	230 460	1.6	.8	---	45717	115	1.6	1.0	360	5
203	METAL ROLL	1.00	1725	3	208 230 460	3.6	3.4	1.7	91059	208	3.5	1.0	100	5
207	10" UNISAW	3.00	3450	3	230 460	7.4	3.7	---	96670	208	8.2	3.5	50	5
203	PEDESTAL GRINDER	2.00	1800	3	220	6.2	---	---	093077	208	6.6	3.1	100	5
203	COOLANT PUMP	.50	1725	3	208 416	2.0	1.0	---	02574	208	2.0	2.7	200	5
207	ROCKWELL DRILL PRESS	.75	1725	3	230 460	3.0	1.5	---	98285	208	3.0	2.0	100	5
207	COMB BELT & DISC SAN	1.00	1730	3	208 416	3.2	1.6	---	93576	208	3.2	2.3	100	5
247	CONDENSATE PUMP DRIV	.75	3450	3	208 220 440	2.5	1.3	---	NONE	208	2.5	1.9	200	5
203	DELTA GRINDER	1.00	1725	3	225 440	2.8	1.4	---	PFU3	208	3.0	1.6	100	5
203	WELLS BANDSAW	1.00	1750	3	020 440	3.3	1.7	---	IS	208	3.5	2.5	100	5

DAY AND ZIMMERMAN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
715H	CONVEYOR MOTOR	.50	1725	3	208 220 440	1.9 1.9 1.0	---	---	87402	208	1.9	1.0	384	5
202	STEAM CLEANER PUMP	.75	1725	1	115 230	13.0 6.5	B56	F2	96074	115	13.0	11.7	100	5
715A	MILLING MACHINE	1.00	1800	3	220 440	3.2 1.6	---	SCV	090970	208	1.6	1.7	246	5
202	BENCH GRINDER	1.00	1800	1	110 115	13.0	---	C	18461	115	13.0	10.5	100	6
202	FLOOR HEATER	1.50	1740	3	220 440	4.6 2.3	224	---	41313	208	4.9	4.1	100	7
715B	BAND SAW	.50	1725	1	115	8.2	---	FC	---	115	8.2	7.4	200	7
202	BENCH GRINDER	.50	3450	1	110	6.2	118	---	79226	115	5.9	3.5	100	7
203	POTABLE AIR COMPRES	1.00	3450	1	115 230	15.0 7.5	G56	---	092157	115	15.0	14.2	100	7
715E	GRINDER	.50	3450	1	115	5.6	---	---	79204	115	5.6	2.6	600	7
324	LATHE	1.50	1735	3	200	5.2	---	TFR83	94055	208	5.2	4.7	100	7
203	ROCKWELL DRILL PRESS	1.50	1725	3	230 460	4.8 2.4	C66Y	TDR-BZ	093078	208	5.3	2.1	100	7
951	CONDENSATE PUMP	.75	3450	3	208 220 440	2.5 1.3	C56	P	NONE	208	2.5	2.3	200	7
202	BLOWER HEATER	2.00	1140	3	208 416	6.6 3.3	225	EM	75290	208	6.6	5.0	100	7
951	POTABLE COOLING FAN	.33	1725	3	208	2.8	---	---	64540	208	2.8	4.7	100	7
203	CINCIN CHUCK MOTOR	.50	1140	3	230	2.2	---	---	92766	208	2.5	2.7	200	7
203	EXHAUST FAN WEST	1.50	1000	1	115 230	18.4 9.2	184	KC	91058	115	18.4	7.6	100	8
203	EXHAUST FAN EAST	1.50	1000	1	115 230	18.4 9.2	184	KC	91056	115	18.4	7.5	100	8
202	5TH N OH DOOR OPENER	.33	1725	1	115	5.6	562	---	47251	115	5.6	6.3	300	8
202	8TH N OH DOOR OPENER	.33	1725	1	115	5.6	562	---	47252	115	5.6	7.0	300	8
202	2ND N OH DOOR OPENER	.33	1725	1	115	5.6	562	---	7256	115	5.6	5.3	300	8
202	7TH N OH DOOR OPENER	.33	1725	1	115	5.6	562	---	27255	115	5.6	5.3	300	8
202	4TH N OH DOOR OPENER	.33	1725	1	115	5.6	562	---	27253	115	5.6	5.3	300	8
202	W OVERHEAD DOOR OPEN	.33	1725	1	115	5.6	562	---	NONE	115	5.6	5.1	300	8
202	N OVERHEAD DOOR OPEN	.33	1750	1	115 230	5.6 2.8	562	---	NONE	115	5.6	5.7	300	8
202	3RD N OH DOOR OPENER	.50	1725	1	115	5.6	562	---	47254	115	5.6	5.1	300	8
201	EXHAUST FAN	1.50	1725	1	115 230	18.4 9.2	184	KC	NONE	230	9.2	8.0	100	8
202	6TH N OH DOOR OPENER	.33	1725	1	115	5.6	562	---	NONE	115	5.6	5.5	300	8
203	RADIAL PRESS TABLE	.50	500	3	220 440	6.2 3.1	A66	SPLT	73918	208	6.6	6.1	100	9
203	DRILL PRESS ELEV MTR	1.50	1700	3	220 440	5.8 2.9	518S	CTK	71732	208	6.1	3.7	100	9
202	CONDENSATE PUMP DRIV	.75	3450	3	208 220 440	2.5 1.3	G56	PFU3	NONE	208	2.5	2.1	300	9
203	ELEC SHP EXHAUST FAN	1.50	1725	3	208	6.1	---	---	NONE	208	6.1	3.9	100	9
203	ELEC INSIDE GRINDER	1.00	3450	3	220 440	2.8 1.4	J56Y	TA	92766	208	3.0	3.8	200	9
057	SAW MOTOR	5.00	1730	3	230 460	13.2 6.6	184T	TFL	98594	208	13.2	5.8	100	9
207	PLANER	5.00	3600	3	208 220 440	13.2 14.4 7.2	AF0-22	P000	93604	208	13.2	9.9	50	9
203	PUMP MOTOR	.75	1150	3	220 440	2.8 1.4	203	---	NONE	208	3.0	2.8	200	9
202	PEDESTAL GRINDER	2.00	1800	3	220 440	6.0 3.0	---	---	24868	208	6.4	3.1	100	9
203	ELEC SHP EXHAUST FAN	1.50	1725	3	208	6.1	---	---	NONE	208	6.1	2.3	100	9
715A	TOOL POLISH MOTOR #1	.75	3450	3	208 220 440	5.0 2.5	---	---	---	208	2.5	1.2	492	9
203	GRINDER MOTOR	1.00	3400	3	208 220 440	3.6 2.8 1.4	LJX42	L	90922	208	3.6	1.5	200	9
715B	RADIAL ARM SAW	2.00	3425	3	230 460 480	5.0 2.5	---	---	89242	208	5.0	2.0	300	9
207	ROCKWELL BANDSAW	2.00	1725	3	230 460	6.0 3.0	F66Y	TDR-G7	093076	208	6.6	4.0	100	10
203	HARDING LATHE	1.50	1700	3	208 220	3.6 3.4	215	P	98545	208	3.6	3.0	200	10
909	HEATER BLOWER	1.00	1725	3	220 440	3.3 1.7	204	E15	68824	208	3.3	2.3	300	10
102	CONDENSATE PUMP	.75	3450	3	208 230 460	2.6 1.3	56	---	96567	208	2.6	1.4	500	10
243	CONDENSER FAN	.33	---	3	208 440	2.3	---	---	269105A	208	2.3	---	300	10
243	CONDENSER FAN	.33	---	3	208 440	2.3	---	---	269105A	208	2.3	---	300	10
904	CONDENSATE PUMP	.75	3450	3	208 230 460	2.6 1.3	56	---	96560	208	2.6	1.5	500	10
243	CONDENSER FAN	.33	---	3	208 440	2.3	---	---	269105A	208	2.3	---	300	10
715A	TOOL POLISH MOTOR #3	.50	1800	3	208 416	2.3 1.2	---	E	87394	208	2.3	1.5	492	10
315	POWDER PRESS #1	.33	1725	3	230 460	2.5 .5	---	---	---	460	.5	.3	1000	10
315	DISCHARGE CONVEYOR	.33	1725	3	230 460	2.5 .5	---	---	---	460	.5	.3	1000	10
730	AIR HANDLER MOTOR	.75	1725	3	208 220 440	2.8 1.4	---	P	85874	208	2.8	1.7	416	10

DAY AND ZIMMERMAN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
112	WATER SOFTENER EAST	.33	1725	1	115 230	6.6 3.3	5820	RA	79256	115	6.6	3.0	500	12
203	LOUIS ROCK SHAPER	1.00	1720	3	220 440	7.6 3.8	163		64510	208	8.0	10.0	100	12
203	RADIAL PRESS SPINDLE	3.00	1740	3	220 440	8.4 4.2	225		73918	208	8.9	4.1	100	12
203	POWER HACKSAW	3.00	1725	3	220 440	8.5 4.2	225	K	79006	208	8.9	4.5	200	12
102	PAPER CUTTER	3.00	1725	3	208	10.4	182T	SC	092888	208	10.4	8.5	100	12
203	CROSS FEED	1.00	1800	3	220 440	3.8 1.8	184	MLE	97319	208	4.0	3.8	200	12
951	SUMP PIT PUMP X-RAY	.50	1725	3	208	1.7	7240W	RA	SP 130	208	1.7	1.1	100	12
203	SURFACE GRINDER	15.00	1160	3	208	4.5	0232S	CTX	98285	208	4.5	5.0	200	12
207	PORTABLE AIR COMPRESS	1.00	1725	1	115 230	14.0 7.0	182		90682	115	14.0	11.5	200	13
247	PORT AIR COMPRESSOR	---	1725	1	115 230	14.0 7.0	182	CDR-LE	090692	115	14.0	13.5	200	13
715A	TOOL POLISH MOTOR #2	1.50	1710	3	230 460	4.8 2.4	---	L	---	208	4.8	2.0	492	14
203	DO-ALL BANDSAW	2.00	---	3	230	9.0	---		90699	208	9.5	4.5	100	14
311	CONDENSATE MOTOR	.75	3450	3	230	2.6	---		96570	208	2.6	1.3	700	14
324	GRINDER	.50	3450	3	208	2.0	---		90535	208	2.0	1.9	500	14
203	DRILL PRESS	2.00	1725	3	208 220 440	5.8 2.9	224	TS	78623	208	5.8	4.7	200	14
203	WEBB METAL ROLL	3.00	1150	3	208 220 440	10.0 5.1	213T		92651	208	10.0	6.5	100	14
203	DELUXO PUMP MOTOR	1.50	1725	3	208 220 440	4.6 2.3	184		---	208	4.6	3.4	200	14
325	#2 CONDENSER FAN	.33	---	3	208 240	10.1	---		89393	208	10.1	1.9	500	14
058	AIR HANDLER MOTOR	.75	1725	1	115 230	5.2	H56	RK-3	85887	115	5.2	---	300	14
112	WATER SOFTENER WEST	.33	1725	1	115 230	6.6 3.3	5820	RA	79255	115	6.6	3.6	500	15
717	SHAKE MOTOR	1.00	1725	1	115 230	13.8 6.9	---		6121	115	13.8	9.0	200	15
203	NORTON CHUCK MOTOR	.75	1135	3	220 440	5.1 2.6	203	K	75458	208	5.4	3.7	200	16
809	BLOWER MOTOR	3.00	1750	3	220	8.4	225	RP-1	77008	208	8.4	3.5	300	16
324	DRILL PRESS	1.00	1130	3	220 440	3.4 1.7	---		---	208	3.4	2.0	500	16
315	POWDER PRESS DISCHRG	.33	1725	3	230 460	2.5	---		96433	460	2.5	11.3	1000	16
203	PIPE THREADER	3.00	---	3	220	---	---		---	---	---	---	---	16
315	CONVEY SWAGE MACH #1	.33	1725	3	230 460	1.5	---		---	460	1.5	5	1000	16
315	CONVEYOR DISCHARGE	.33	1725	3	230 460	1.2	---	P	---	460	1.2	5	1000	16
315	CONVEYOR ULTRA ASSY	.33	1725	3	230 460	1.2	---		---	460	1.2	5	1000	16
315	ASSEMBLY DISCHARGE	.33	1725	3	230 460	1.2	---		---	460	1.2	5	1000	16
315	BODY CONVEYOR #1	.33	1725	3	230 460	1.2	---	P	---	460	1.2	5	1000	16
315	CONV CONE HOPPER	.33	1725	3	230 460	1.5	---		---	460	1.5	5	1000	16
315	DRV SYNTRON TO SWAGE	.33	1725	3	230 460	1.5	---		---	460	1.5	5	1000	16
315	CONV ASSY DISCHARGE	.33	1725	3	230 460	1.2	---		---	460	1.2	5	1000	16
315	CONV FEED CLEANER #1	.33	1725	3	230 460	1.5	---		---	460	1.5	5	1000	16
207	ROCKWELL RADIAL SAW	3.00	3450	3	230 460	8.2	---		---	460	8.2	5	1000	16
325	#1 CONDENSER FAN	.33	---	3	208 240	2.1	56Y	TS	993079	208	2.1	4.5	100	16
808	BOILER OIL FEEDER	.33	1725	3	115 208 230	6.0 3.0	56C		89393	208	6.0	2.5	500	17
203	FEED MTR MILL MACH	2.00	1730	3	208 220 440	6.0 3.0	184	K	94688	208	6.0	13.6	200	17
203	MILLING MACH TABLE	---	---	---	---	---	---		97815	---	---	---	---	18
058	AIR HANDLER MOTOR	.33	3450	3	230 460	1.8	48		NONE	208	2.0	1.3	1500	18
315	CONV DISASSY TO SWAG	.33	1725	3	230 460	1.5	---		---	460	1.5	6	1000	19
112	DRYER 089518	.50	1725	3	208 220 440	1.9 1.0	56		089520	208	1.9	1.8	750	19
202	CAR WASHER	1.00	1725	1	115	14.0	F56	KD	98539	115	14.0	13.9	300	19
315	CONV UNTRAY TO ASSY	.33	1725	3	230 460	1.5 7.5	---		---	460	7.5	6	1000	19
315	ASSEMBLY MACHINE	.50	1725	3	230 460	2.2 1.1	---		---	460	2.2	6	1000	19
203	BAND SAW	1.00	3450	3	220	3.2	204	PM	76744	208	3.4	2.6	500	19
315	CONV SYNTRON TO SWAG	.33	1725	3	230 460	1.5	---		---	460	1.5	6	1000	19
315	DRV DISASSY TO SWAGE	.33	1725	3	230 460	1.5	---		---	460	1.5	6	1000	19
315	CONV FEED GAGE MACH	.33	1725	3	230 460	1.5	---		---	460	1.5	6	1000	19
315	AIR COMPRESSOR	.33	1725	1	115 230	5.2	---	CS	NONE	115	5.2	5.4	800	20
951	RING CONVEYOR MOTOR	3.00	1160	3	208	9.3	254	ES	42086	208	9.3	7.1	200	21

DAY AND ZIMMERMAN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
107	HOT WTR RETURN PUMP	.50	1750	3	208 230 460	1.8 1.7	.9		NONE	208	1.8	1.5	1000	21
202	HEATER FAN MOTOR	.75	1725	3	208 416	2.5	1.3		71927	208	1.3	1.5	1000	21
203	PEDESTAL GRINDER	5.00	1750	3	220	13.2		GPEA	63931	208	14.0	6.5	100	21
203	GRINDER MOTOR	2.00	3450	3	208 220	6.8	6.0	LB	95589	208	6.8	4.0	200	21
247	PAINT BOOTH WTR PUMP	5.00	1740	3	200	15.0			NONE	208	14.5	14.6	100	21
312	CONDENSATE PUMP	.75	3450	3	208 230 460	2.6 1.3			96565	208	2.6	1.8	700	21
325	CONDENSATE MOTOR	.75	3450	3	208 230 460	2.6 1.3			96562	208	2.6	2.0	700	21
315	NORTH CONDENSATE MTR	1.50	3450	3	200	4.4		CS	NONE	208	4.4	2.4	700	23
315	GAGING MACH FEED CON	.33	1725	3	230 460	1.5	.8			460	.8	.7	1000	23
315	POWDER CONV DRIVE	.33	1725	3	230 460	1.5	.8			460	.8	.7	1000	23
315	TRAYING CONVEYOR	.33	1725	3	230 460	1.5	.8	P		460	.8	.7	1000	23
315	DISASSEMBLY DRIVE	.50	1725	3	230 460	2.2	1.1			460	1.1	1.1	1000	23
203	OH AIR HANDLER WEST	1.00	1725	3	220 440	3.0 1.5			8940	208	3.2	1.9	500	23
315	SYNTRON BOWL #1	.33	1725	3	230 460	1.5	.8			460	.8	.7	1000	23
315	DISASSEMBLY DRIVE #1	.50	1725	3	230 460	2.2	1.1			460	1.1	.7	1000	23
7158	RIDGID PIPE VICE			1	115				97937	115		8.1	615	23
315	CONV DRV FEED CLEAN	.33	1725	3	230 460	1.5	.8			460	.8	.7	1000	23
315	MAIN ASSEMBLY #1	.50	1725	3	230 460	2.2	1.1	P		460	1.1	.7	1000	23
203	REL ROCKFORD LATHE	5.00	1750	3	220 440	14.4	7.2		63802	208	15.2	5.5	100	23
315	CONV UNTRAY TO ASSY	.33	1725	3	230 460	1.5	.8			460	.8	.7	1000	23
315	GAGING DRIVE MOTOR	.50	1725	3	230 460	2.2	1.1			460	1.1	.7	1000	23
315	CONV - CONE HOPPER	.33	1725	3	230 460	1.5	.8			460	.8	.7	1000	23
305	CONDENSATE MOTOR	1.50	3450	3	200 208	4.5		SC	NONE	208	4.5	2.5	700	24
203	NIGARA SHEARS	5.00	1735	3	220 440	15.8	7.9	OZA	68680	208	16.7	15.1	100	24
744	BOX FAN	1.50	1740	3	230 460	4.8	2.4	L		460	2.4	1.7	984	24
052	OVERHEAD HEATER	.75	1725	1	115 230	10.4	5.2	KC		115	10.4	11.0	500	25
315	SOUTH CONDENSATE MTR	1.50	3450	3	200	4.4		CS		208	4.4	2.7	700	26
715A	ROCKWELL LATHE	1.50	1735	3	200	5.2		TFR-8E	94054	208	5.2	3.8	492	26
315	CONV - CONE HOPPER	.33	1725	3	230 460	1.5	.8			460	.8	.8	1000	26
203	BROWN & SHARP MILL	3.00	1650	3	220 440	8.6	4.3	PSD1	97319	208	9.1	5.3	200	26
722	CONVEYOR MOTOR	.50	1725	3	220	1.3			48228	208	1.3	.9	2016	26
053	FUEL OIL BURNER	.33	1725	1	115 230	1.9		VL	72792	115	6.0	2.9	2016	27
203	GRINDER MOTOR	2.00	1740	3	220 440	6.0	3.0	APK	92766	208	6.1	4.3	200	27
202	AIR COMPRESSOR	1.50	1745	3	208	6.6		SC	88940	208	6.6	4.0	300	28
324	MILLING MACHINE	3.00	1140	3	220 440	9.2	4.6	COO	96747	208	4.6	2.8	800	28
202	HYDRAULIC HOIST (SO)	2.00	1800	3	220 440	6.0	3.0	K	05946	208	6.1	6.1	200	28
247	STAT AIR COMPRESSOR	5.00	1160	3	220 440	18.0	9.0	SES	77457	208	19.0	5.4	300	28
203	DRILL PRESS SPND MTR	1.50	3450	3	200 208	4.4		CTA	71732	208	4.4	2.8	700	28
304	WEST CONDENSATE MTR	1.00	1725	3	220 440	3.2	1.6	SC	NONE	208	3.2	2.8	700	28
324	BAND SAW	3.00	1140	3	220 440	9.2	4.6	K	05277	208	9.8	5.5	200	28
202	HYDRAULIC HOIST (NO)	2.00	3460	3	200	6.0			05947	208	6.0	3.0	700	29
302	CONDENSATE MOTOR	7.50	1725	3	230 460	2.2	1.1	OX	0104799	208	2.2	20.6	100	29
203	AIR COMPRESSOR	.50	1725	3	208 460	2.1	1.0			460	1.1	.9	1000	29
315	UNTRAYING MOTOR #2	.50	1725	3	208 460	2.2	1.1			208	2.1	.9	1500	29
324	CONVEYOR LEAD CUP #2	1.50	3450	3	200 208	4.5		SC	NONE	208	4.5	3.0	700	29
304	EAST CONDENSATE MTR	.50	1725	3	230 460	2.2	1.1			460	1.1	.9	1000	29
315	TRAYING TABLE	.50	1725	3	230 460	2.2	1.1			460	1.1	.9	1000	29
315	UNTRAY DRIVE MTR #3	.33	1725	3	230 460	1.5	.8			460	1.5	.9	1500	29
324	CONVEYOR LEAD CUP #3	.33	1725	3	230 460	5.0	2.2	CJ5NB		460	2.2	1.8	500	29
744	W COOLING TOWER FAN	5.00	1735	3	460	2.2	1.1	P		440	1.1	.9	1000	29
315	BODY UNTRAYING #1	.50	1725	3	230 440	2.2	1.1			440	1.1	.9	1000	29

DAY AND ZIMME IN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
311	HYD MOTOR	5.00	1740	3	230 460	13.0 6.5	---	---	94092	208	13.0	6.0	150	29
325	AIR CONDITIONER	1.00	---	---	---	---	---	---	89393	---	---	4.5	700	29
107	CONDENSATE PUMP MTR	1.00	---	3	200	4.6	M56	P	NONE	208	4.4	4.0	500	29
102	DUPLICATOR	.33	1725	1	115	5.7	---	---	96536	115	5.7	5.5	1200	30
315	CONVEYOR DRIVE #1	.50	1725	3	230 460	2.0 1.0	---	---	---	460	1.0	1.0	1000	31
315	#4 FEED-IN CONNOLLY	.33	1725	3	230 460	1.2 .6	---	P	---	460	.6	.5	2000	31
315	GAGING MACHINE DRIVE	.50	1725	3	230 460	2.2 1.1	---	P	---	460	1.1	1.0	1000	31
315	#9 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.5 .8	---	P	---	460	.8	.5	2000	31
315	#9 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5 .8	---	P	---	460	.8	.5	2000	31
312	AIR HANDLER MOTOR	.75	1750	3	208	2.5	---	P	41152	208	2.5	2.2	1000	31
315	#1 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.5 .8	---	P	---	460	.8	.5	2000	31
315	#2 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5 .6	---	P	---	460	.6	.5	2000	31
315	#6 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5 .8	---	P	---	460	.8	.5	2000	31
315	ASSEMBLY DRIVE MOTOR	.50	1725	3	230 460	2.2 1.1	---	---	---	460	1.1	1.0	1000	31
315	#5 FEED-IN CONNOLLY	.33	1725	3	230 460	1.6 .8	---	P	---	460	.8	.5	2000	31
247	AIR CONDITIONER	---	---	---	---	---	---	---	NONE	---	---	10.3	200	31
315	GAGING MACH FEEDING	.33	1725	3	230 460	1.5 .8	---	---	---	460	.8	1.0	1000	31
315	#7 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5 .8	---	P	---	460	.8	.5	2000	31
315	#8 HYD MTR CONNOLLY	5.00	1730	3	230 460	14.0 7.0	---	P	---	460	7.0	5.0	2000	31
315	#6 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.5 .8	---	P	---	460	.8	.5	2000	31
315	#8 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.5 .8	---	P	---	460	.8	.5	2000	31
315	#5 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.2 .8	---	P	---	460	.8	.5	2000	31
715A	GRINDER	.75	3450	1	115 230	8.2 4.1	---	KN	92760	115	8.2	5.3	738	31
314	MARATHON MTR PUMP #1	.75	1725	3	200 400	2.6 1.3	---	T	NONE	208	2.6	2.3	1000	31
315	#3 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.5 .6	---	P	---	460	.6	.5	2000	31
315	#8 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5 .8	---	P	---	460	.8	.5	2000	31
315	#3 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5 .8	---	P	---	460	.8	.5	2000	31
324	LEAD PRESS #3	.50	1725	3	230 460	2.2 1.1	---	---	---	208	2.2	1.0	1500	31
203	WEST ROCKFORD SHAPER	7.50	1165	3	220 440	21.0 10.5	324	---	64508	208	22.2	16.0	100	31
324	LATHE	7.50	1735	3	220 440	20.1 10.0	---	---	96884	208	20.1	6.7	150	31
305	FUZE CUT-OFF	.33	1725	1	115 208 230	7.0 3.5	---	---	96820	115	7.0	7.0	1000	32
315	CORNER CHAIN BUCKET	.75	1725	3	230 460	2.5 1.3	---	P	---	460	1.3	.7	1500	33
308	POWDER CONVEYOR	.75	1725	3	230 460	2.5 1.3	---	P	---	460	1.3	.7	1500	33
243	AIR HANDLER BLOWER	3.00	3460	3	208 220 440	7.6 3.8	F56	TDR-BH	89391	208	7.6	6.0	300	33
203	WEBB METAL ROLL	7.50	1165	3	208 220 440	22.3 11.1	254T	---	92651	208	22.3	10.1	100	33
314	FUEL OIL PUMP MOTOR	.33	1725	3	115 230	7.0 3.5	---	---	97270	208	7.0	2.1	1000	33
315	DRILL PRESS	.33	1725	3	208 220	1.3	---	---	79526	208	1.3	2.9	800	33
314	FUEL OIL PUMP MOTOR	.33	1725	3	115 230	7.0 3.5	---	---	97271	208	7.0	2.1	1000	33
107	AIR COMPRESSOR	.50	---	1	115 230	8.6 4.3	56	N	NONE	115	8.6	7.5	1000	35
315	DISASSEMBLY DRIVE	.50	1725	3	230 460	2.2 1.1	---	---	---	460	1.1	1.1	1000	35
328	COOLING TOWER FAN	1.00	1730	3	230 460	3.8 1.9	---	---	---	460	1.9	2.2	1000	35
324	LEAD PRES LEAD CUP 2	.50	1725	3	230 460	2.1 1.0	---	---	---	208	2.1	1.1	1500	35
311A	TEST COMPRESSION	1.00	1725	3	230	4.4	---	P	6635	208	4.4	2.3	1000	36
203	TRACING MIL GUILL	1.50	1700	3	208 220 440	5.1 2.6	145TY-4	TVY	92695	208	5.1	2.5	1000	36
202	N OVERHEAD HEAT FAN	1.00	1750	3	208	3.2	---	---	41244	208	3.2	2.5	1000	36
315	EXHAUST FAN	.50	1725	3	115 230	8.0 4.0	---	---	98377	115	8.0	7.9	1000	37
315	COOLING TOWER MOTOR	1.00	1740	3	230 460	3.8 1.9	---	---	NONE	460	1.9	2.0	1000	38
315	#10 FEED-IN CONVEYOR	.33	1725	3	230 460	1.5 .8	---	---	---	460	.8	.6	2000	38
112	DRYER 088518	1.50	1730	3	208 220 440	1.2 2.1	184	K	088519	208	4.2	3.6	750	38
315	AIR CONDITIONER FAN	.50	1075	3	230 460	3.2 1.6	---	---	---	460	1.6	1.7	700	38
3/4	AIR COMP FOR DELUGE	1.00	1725	3	208 440	4.0 1.9	---	---	---	208	4.0	1.4	300	38
112	DRYER TUMBLE 085770	2.00	1000	3	208 220 440	7.4 7.0	213	H	085773	208	7.4	3.6	750	38

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
315	CONV MTR ULTRA CLEAN	.33	1725	3	230 460	1.2	6	---	---	460	.6	.6	2000	38
112	DRYER TUMBLER	2.00	1000	3	208 220 440	7.4	7.0	3.5	213	208	7.4	3.6	750	38
315	ULTRASONIC CONVEYOR	.33	1725	3	230 460	1.5	.8	---	---	460	.8	.8	2000	38
324	CONDENSATE PUMP	.75	3450	3	230 460	2.6	1.3	---	---	208	2.6	9 1.8	700	40
203	CINCINNATI GRINDER	5.00	1750	3	220 ---	13.2	---	---	63932	208	14.0	8.0	200	40
201	PAPER BALER	10.00	1745	3	230 460	26.0	13.0	---	---	208	28.8	20.0	100	42
716F	JONES LOADER #6	2.00	1745	3	208 ---	6.8	---	---	88951	208	6.8	5.7	500	42
203	BRAKE PRESS	10.00	1620	3	220 440	27.0	13.5	---	---	208	28.6	22.7	100	42
715A	LATHE	3.00	1160	3	220 440	9.4	4.2	---	---	208	9.4	5.9	492	42
107	CHILL WATER RETURN	1.00	1725	3	208 230 460	3.4	3.2	1.6	Y56Y	208	3.4	3.0	1000	43
203	NORTON GRINDER MOTOR	5.00	3460	3	220 440	14.2	7.1	---	---	208	15.0	7.0	200	43
716F	JONES LOADER #7	2.00	1745	3	208 ---	6.8	---	---	88952	208	6.8	6.0	500	43
315	POWDER CORNER CHAIN	.75	1725	3	230 460	2.5	1.3	---	---	460	1.3	.9	1500	43
315	CORNER CHAIN BUCK RE	.75	1725	3	230 460	2.5	1.3	---	---	460	1.3	.9	1500	43
112	BOILER FUEL OIL PUMP	.33	1725	3	208 220	1.1	---	---	80256	208	1.1	1.6	3000	43
308	RETURN MOTOR	.75	1725	3	230 460	2.5	1.3	---	---	460	1.3	.9	1500	43
308	CORNER CHAIN DRV #1	.75	1725	3	230 460	2.5	1.3	---	---	460	1.3	.9	1500	43
112	DRYER TUMBLER 85768	2.00	1000	3	208 220 440	7.4	7.0	3.5	213	208	7.4	4.0	750	43
308	POWDER CONV DRIVE	.75	1725	3	230 460	2.5	1.3	---	---	460	1.3	.9	1500	43
203	PEERLESS SAW/MOTOR	5.00	1740	3	208 230 440	14.8	7.4	---	---	208	14.8	9.2	200	43
102	DUPLICATOR	.50	1725	1	115 ---	8.4	---	---	96536	115	8.4	8.0	1200	44
315	#7 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	#2 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.2	.8	---	---	460	.8	.7	2000	45
315	#4 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	#5 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
202	AIR COMP FORKLIFT SH	5.00	1735	3	220 ---	14.6	---	---	03727	208	15.5	14.8	200	45
315	#8 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
203	END MILL SPINDLE MTR	2.00	1725	3	230 460	6.4	3.2	---	---	210P	7.1	3.1	1000	45
315	#7 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	AIR CONDITIONER FAN	.50	1075	3	230 460	3.2	1.6	---	---	460	1.6	2.0	700	45
315	#3 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	#2 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	#1 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5	.8	---	---	460	.8	.7	2000	45
315	#9 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	#10 FEED-OUT CONVEY	.33	1725	3	230 460	1.5	.8	---	---	460	.8	.7	2000	45
315	CONV MTR TRAY TABLE	.33	1725	3	230 460	1.5	.8	---	---	460	.8	.7	2000	45
315	AIR CONDITIONER FAN	.50	1075	3	460 ---	2.2	---	---	---	460	2.2	2.0	700	45
315	#2 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
315	#8 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.7	2000	45
904	VACUUM UNIT	5.00	3460	3	208 ---	13.9	---	---	90934	208	13.9	11.1	500	46
202	TRANE OH HEAT UNIT	.75	1750	3	220 440	2.4	1.2	---	---	208	2.6	3.1	1000	47
315	AIR CONDITIONER FAN	.50	1075	3	460 ---	2.2	---	---	78944	460	2.2	2.1	700	47
209	WTR SOFT PUMP DRV MO	.50	1725	3	220 ---	1.6	---	---	---	208	1.7	1.5	2016	47
315	EAST AIR CURTAIN MTR	2.00	1165	3	230 460	6.6	3.3	---	---	460	3.3	6.1	500	48
315	CONV - IN FEED	.75	1725	3	230 460	2.5	1.3	---	---	460	1.3	1.0	1500	48
203	OH AIR HANDLER EAST	2.00	1730	3	208 220 440	6.7	6.8	3.4	184	208	6.7	5.2	500	48
315	AIR CURTAIN MOTOR	2.00	1165	3	230 460	6.6	3.3	---	---	460	3.3	6.0	500	48
717	CONDENSATE MOTOR	1.00	3450	3	230 460	3.2	1.6	---	---	460	1.6	1.5	1000	48
726	CONDENSATE MOTOR	.75	3450	3	208 220 440	2.5	1.3	---	---	208	2.5	1.8	1968	50
315	WEST AIR CURTAIN MTR	2.00	1150	3	208 220 440	8.2	7.8	3.9	96154	208	8.2	6.9	500	52
302	CONDENSATE MOTOR	2.00	3460	3	200 ---	6.0	---	---	---	208	6.0	5.3	700	52
7151	VACUUM PUMP MOTOR	---	---	3	---	---	---	---	---	---	---	3.2	2016	52

DAY AND ZIMMERMANN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST	
315	WEST END AIR CURTAIN	2.00	1150	3	208 220 440	8.2	7.8	3.9	EN	208	8.2	7.0	500	54	
052	AIR COMPRESSOR	3.00	1725	3	208 416	8.4	4.2	182T-623M	96153	208	8.4	7.5	500	54	
209	#2 STOCKER MOTOR	1.00	1735	3	208 220 440	3.6	3.4	1.7	CEIX	93321	208	3.6	1.9	2016	55
315	WEST AIR CURTAIN MTR	2.00	1150	3	208 220 440	8.2	7.8	3.9	EN	81158	208	8.2	7.2	500	55
722	EXHAUST FAN	.50	1725	1	115 230	3.9	1.8	---	96154	115	3.9	6.0	2016	56	
315	#10 TAPE FIXTUR VARI	.50	1725	3	230 460	2.0	1.1	---	92067	460	1.1	.7	2000	57	
315	WEST END AIR CURTAIN	2.00	1150	3	208 220 440	8.2	7.8	3.9	EN	96153	208	8.2	7.4	500	57
315	#1 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.9	2000	57	
324	TRAYING LEAD CUP #3	.50	1725	3	230 460	2.2	1.1	---	---	208	2.2	1.2	1500	57	
315	#7 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.5	.8	---	---	460	.8	.9	2000	57	
315	#5 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.9	2000	57	
315	#4 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.9	2000	57	
315	#3 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.9	2000	57	
325	AIR HANDLER	1.50	1725	3	220	---	---	---	NONE	208	---	3.8	1000	57	
315	GAGING MACHINE DRIVE	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	0.9	2000	57	
315	#1 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	.9	2000	57	
203	TRAC MILL HYDR PUMP	3.00	1800	3	230 460	8.4	4.2	AVO-184	92695	208	9.3	3.9	1000	57	
315	#10 FUZE GAGING VARI	.50	1725	3	230 460	2.2	1.1	---	P	460	1.1	.9	2000	57	
058	AIR HANDLER MOTOR	1.50	3450	3	220 440	4.4	2.2	56	---	208	4.7	1.9	2016	59	
904	PAINT BOOTH CONVEYOR	2.00	1800	3	208 416	6.4	3.2	224-4	45764	208	6.4	4.1	1000	59	
209	BOILER #3 STOCK DRIV	1.00	1735	3	208 220 440	3.6	3.4	1.7	CEIX	81218	208	3.6	2.1	2016	61
053	BLOWER MOTOR	.50	1725	1	115 230	7.0	3.5	63A	41177	115	7.0	6.6	2016	61	
207	TABLE SAW	5.00	3450	3	208 220 440	14.0	7.0	525	48007	208	14.0	7.5	300	61	
324	CONVEYOR LEAD CUP #3	.50	1725	3	230 460	2.2	1.1	---	---	208	2.2	1.3	1500	62	
324	CONVEYOR LEAD CUP #2	.33	1725	3	230 460	1.4	.7	---	---	208	1.4	1.3	1500	62	
112	BOILER CHEM MIXER	.50	1725	1	115	---	---	48	NONE	115	5.0	4.6	3000	63	
315	POWDER CONV DRV MTR	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	1.0	2000	64	
315	#9 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	1.0	2000	64	
722	AIR HANDLER	1.00	1740	3	208	---	---	---	IS	41107	208	3.3	2.2	2016	64
203	JIG BORE SADDLE MOTO	1.00	1600	3	220 440	4.0	2.0	612	91741	208	4.2	4.4	1000	64	
315	DRIVE MTR TRAY TABLE	.50	1725	3	230 460	2.2	1.1	---	---	460	1.1	1.0	2000	64	
207	TOPS RADIAL SAW	7.50	3450	3	208 220 440	22.0	11.0	---	---	092903	208	22.0	20.0	200	64
209	DRAG MOTOR	1.50	1725	3	230 460	4.4	4.2	56	---	208	4.4	2.2	2016	64	
315	#6 TAPE FIXTUR CONLY	.50	1725	3	230 460	2.2	1.1	---	P	460	1.1	1.0	2000	64	
209	OIL PUMP MOTOR	.50	1725	1	115 230	7.8	3.9	56	---	115	7.8	7.0	2016	65	
715H	EXHAUST FAN	1.00	1720	3	220 440	3.2	1.6	---	---	208	3.2	2.3	1968	66	
708	AIR HANDLER MOTOR	.50	1750	3	208 416	1.6	.8	---	---	208	1.6	.9	5014	66	
715E	RIDGID PIPE VICE	---	---	1	115	---	---	---	---	115	---	9.9	1476	67	
080	AIR COMPRESSOR	1.50	1500	3	208 416	4.7	2.4	59-5	SC	40999	208	4.7	4.7	1000	68
902	WATER PUMP SOUTH	.75	1725	3	208 220 440	2.8	2.7	1.4	F56	NONE	208	2.8	2.3	2016	68
112	WASHING MACH 087222	3.00	1740	3	230 460	9.8	4.9	182T	G0G4B	087225	208	10.9	5.6	750	68
724	OIL PUMP MOTOR #2	.75	1725	3	208 220 440	2.8	2.7	1.4	---	208	2.8	2.3	1968	69	
315	E ED VARI-CROSS-OVER	.50	1725	3	230 460	2.0	1.0	---	P	---	208	2.0	1.1	2000	69
902	CHEMICAL FEED PUMP	.33	1725	1	115 230	6.6	3.3	---	---	115	6.6	7.4	2016	69	
112	BOILER FUEL OIL FEED	.33	3450	3	208 220 460	1.5	1.4	.7	4841GM	---	1.5	1.6	3000	69	
058	BURNER MOTOR	.33	1725	1	115 230	6.0	3.0	566	---	115	6.0	7.5	2016	70	
315	#6 FUZE GAGING CONLY	.50	1725	3	230 460	2.2	1.1	---	P	---	208	1.1	1.1	2000	71
324	TRAYING LEAD CUP #2	.50	1725	3	230 460	2.2	1.1	---	---	208	2.2	1.5	500	71	
253	PUMP MOTOR	2.00	1725	3	208	---	---	---	23B2M	40997	208	5.2	4.2	1200	73
739	AIR HANDLER	.50	1735	3	208	---	---	---	---	73650	208	1.6	1.0	5014	73
112	WASHING MACH 087222	3.00	1745	3	208 220 440	6.7	6.4	3.2	C0GX	087224	208	6.7	6.7	750	73
315	VACUUM UNIT #1	5.00	3500	3	230 460	13.8	6.9	---	K	95144	460	6.9	4.6	500	73

DAY AND ZIMMER, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
203	MONARCH LATHE	4.00	1730	3	208	25.0	---	---	093117	208	25.0	10.7	200	73
203	MILL MACH SPIND MTR	10.00	1760	3	220 440	---	51909	4AV-180	97815	208	---	5.1	1000	73
203	SPINDLE MOTOR	5.00	3500	3	208 220 440	26.8 13.4	256U	K	94688	208	26.8	9.7	200	78
314	VACUUM UNIT #4	.75	1725	3	230 480	13.8 6.9	---	---	95146	480	6.9	4.9	500	80
701	MARATHON MTR PUMP #2	3.00	1150	3	200 400	2.6 1.3	---	---	NONE	208	2.6	2.4	1000	81
701	TABLETING PRESS #6	---	---	3	208 220 440	9.2 8.8 4.4	---	---	85990	208	9.2	---	---	84
701	NO. CONDENSATE PUMP	---	---	3	---	---	---	---	---	---	---	---	---	---
902	WATER PUMP NORTH	.75	1725	3	208 220 440	2.8 2.7 1.4	F56	PF	NONE	208	2.8	3.1	2016	85
724	OIL PUMP MOTOR #1	.75	1725	3	208 220 440	2.8 2.7 1.4	---	PF	---	208	2.8	3.0	1968	85
701	TABLETING PRESS #4	3.00	1150	3	208 220 440	9.2 8.8 4.4	---	---	---	208	9.2	3.6	700	86
703	AIR HANDLER	.50	1735	3	208	1.6	---	---	73497	208	1.6	1.2	5014	87
209	BOIL COAL FEED CONVEY	3.00	1750	3	208	14.0	254Y	---	45729	208	14.0	3.0	2016	87
203	MILLIN MACHIN SPINDL	4.00	1720	3	208	13.2	182TY	K	97879	208	13.2	6.0	2016	87
209	#1 STOCKER DRIVE MTR	1.00	1735	3	208 220 440	3.6 3.4 1.7	182	CEIX	81217	208	3.6	5.3	2016	89
701	S. CONDENSATE PUMP	---	---	3	---	---	---	---	---	---	---	---	---	---
112	WASHING MACH 085824	5.00	1650	3	208 416	14.4 7.2	213	P	085847	208	14.4	2.7	4028	90
711	CONDENSATE MOTOR	.75	3450	3	208 230 460	2.8 2.6 1.3	---	---	97904	208	2.8	1.6	4028	94
705	CONDENSATE MOTOR	.75	3450	3	208 230 460	2.6 1.3	---	---	96569	208	2.6	1.6	4028	94
209	OVERFIRE BLOW MTR #3	5.00	1740	3	220 440	12.8 6.4	254	EK	69188	208	12.8	6.3	1000	95
951	SYNCHRONOUS CENTER	10.00	3600	3	220 440	82.4	326	SK	78632	208	82.4	63.8	100	97
112	WASHING MACH 085824	5.00	1650	3	208 416	14.4 7.2	213	P	085845	208	14.4	9.2	750	99
730	AIR COMPRESSOR MOTOR	1.00	1740	3	220 440	3.8 1.9	---	---	69350	208	3.8	3.3	2016	102
744	E COOLING TOWER FAN	5.00	1735	3	460	6.6 2.8	---	---	---	---	---	---	---	---
112	WASHER 085746	5.00	1650	3	208 416	14.4 7.2	213	P	085744	208	14.4	10.0	750	107
722	CONDENSATE MOTOR	.75	3450	3	208 230 460	2.8 2.6 1.3	---	---	---	---	---	---	---	---
207	SAWDUST COLLECTOR	10.00	3480	3	208 416	26.4 13.2	284	CS	27011	208	26.4	23.7	300	114
314	BLOWER MOTOR	5.00	3460	3	200	14.2	---	---	97270	208	14.2	8.3	1000	114
202	AIR COMPRESSOR	10.00	3500	3	220 440	25.0 12.5	284	JEX	78902	208	26.5	30.5	300	114
324	HACK SAW	3.00	1725	3	220 440	8.5 4.2	---	---	96387	208	8.5	3.8	500	116
733	AIR HANDLER MOTOR	1.00	1725	3	230 460	3.4 1.7	---	---	---	---	---	---	---	---
741	CONDENSATE MOTOR	.75	3450	3	208 230 460	2.8 2.6 1.3	---	---	98280	208	2.8	2.0	5014	116
732	AIR HANDLER	1.00	1730	3	208 220 440	3.2 1.6	---	---	---	---	---	---	---	---
058	AIR COMPRESSOR	3.00	1750	3	208	8.9	225	K	---	208	8.9	1.6	5014	116
732	CONDENSER FAN MOTOR	.33	---	3	208 240	2.3	---	ES	05339	208	2.3	8.0	1000	116
107	DUCT BLOWER MOTOR	1.00	---	3	208	4.0	---	---	---	208	4.0	4.0	2000	116
740	EXHAUST FAN	.50	1725	1	115 230	7.8 3.9	---	---	NONE	208	7.8	2.8	5014	117
203	LEBLOND LATHE	15.00	1745	3	220 440	39.2 19.6	326	---	91269	115	41.5	13.1	200	120
311	LATHE-CUTTER	.75	1725	3	115 230	10.6 5.3	---	---	85480	208	5.3	5.0	1500	120
058	AIR HANDLER COMPRESS	---	---	3	---	---	---	---	95643	208	---	---	---	---
247	PAINT BOOTH EXHS FAN	10.00	1725	3	200	29.4	21ST	CJ4R	78268	208	28.3	14.4	1000	120
112	WASHING MACH 085824	5.00	1665	3	208 416	14.4 7.2	215	P	NONE	208	14.4	17.0	300	123
733	CONDENSATE MOTOR	.75	3450	3	208 230 460	2.8 2.6 1.3	---	---	085849	208	2.8	11.4	750	123
302	SCHNEIBEL FAN	3.00	1755	3	200	10.6	---	---	97901	208	10.6	1.7	5014	123
058	AIR HANDLER MOTOR	2.00	1735	3	200	6.8	---	---	NONE	208	6.8	9.0	1000	125
102	AIR COMPRESSOR	3.00	1750	3	110 220	37.2 18.6	145T	TDR-BE	89312	208	35.6	6.3	1500	137
716E	JONES LOADER #9	2.00	1745	3	208	6.8	225	RA	NONE	208	6.8	5.6	1700	137
112	WASHING MACH 085746	5.00	1665	3	208 416	14.4 7.2	215	P	085745	208	14.4	10.0	750	138
112	WASHER 085746	5.00	1650	3	208 416	14.4 7.2	213	P	085743	208	14.4	12.0	750	138
112	AIR COMPRESSOR	5.00	1725	3	208	16.0	---	---	088743	208	16.0	13.0	750	140
314	OIL PUMP	3.00	3405	3	200 400	11.4 5.7	JP184T	---	97270	208	11.4	10.1	1000	140
324	AIR CONDITION BLOWER	2.00	1720	3	200 400	7.1 3.6	---	---	---	208	7.1	6.3	700	140
701	WEST AIR COMPRESSOR	2.00	1725	3	230 460	6.2	---	L	97818	208	6.2	4.9	2016	142

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
314	OIL PUMP	3.00	3405	3	200 400	11.4 5.7	---	---	97271	208	11.4	10.3	1000	142
328	BELL & GOSSETT PUMP	2.00	1735	3	208 230 460	6.3 6.0 3.0	---	---	NONE	460	3.0	3.0	1500	144
315	EXHAUST FAN #5	5.00	1745	3	230 460	14.6 7.3	---	SC	78277	460	7.3	4.5	1000	144
716H	JONES LOADER #10	2.00	1745	3	208	6.8	---	CERX	89310	208	6.8	5.9	1700	144
315	EXHAUST FAN #3	5.00	1745	3	230 460	14.6 7.3	---	SC	78380	460	7.3	4.5	1000	144
186	WATER PUMP MOTOR	2.00	3450	3	208 220 440	5.9 3.0	M56	P	NONE	208	5.9	5.0	2016	145
315	#7 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4 3.7	---	P	---	460	3.7	2.3	2000	147
315	N CIR PUMP/HEATER RM	1.50	1745	3	230 460	5.2 2.6	---	---	---	460	2.6	2.3	2000	147
324	LATHE	10.00	---	3	480	5.5	---	---	---	480	5.5	5.0	900	149
722	EXHAUST FAN	5.00	1150	3	208 440	14.2 7.1	---	K	97194	480	14.2	5.1	2016	149
315	#7 EXHAUST FAN	5.00	1745	3	230 460	14.6 7.3	---	SC	4860A	208	7.3	4.8	1000	152
315	EXHAUST FAN #4	5.00	1745	3	230 460	14.6 7.3	---	SC	78282	460	7.3	4.8	1000	152
209	COAL PIT SHAK CONVEY	2.00	1140	3	220 440	6.3 3.1	225	K	88137	460	6.6	5.0	2016	154
733	AIR COMPRESSOR MOTOR	.33	1725	1	115 230	5.4 2.7	---	---	09822	208	5.4	6.8	5014	157
716E	JONES LOADER #8	2.00	1745	3	208	6.8	---	CERX	93700	115	6.8	6.4	1700	158
315	PORT GRINDER MW SHP	1.00	1725	1	115	13.0	---	---	89311	208	13.0	8.7	1000	160
726	AIR HANDLER MOTOR	3.00	1750	3	208	8.9	---	JS	41128	208	8.9	5.7	1968	161
716H	JONES LOADER #14	2.00	1745	3	208	6.8	---	CERX	89635	208	6.8	6.6	1700	161
203	ENGINE LATHE POWER TU	20.00	1750	3	220 440	53.6 26.8	256T	---	96453	208	56.7	18.5	200	163
902	#3 BURNER MOTOR	7.50	1800	3	200	22.4	AFO-1200	COSO	NONE	208	22.4	11.5	1000	166
315	SHELL WALKER	.50	1725	3	208	4.0	---	---	---	208	4.0	2.6	2000	166
209	BLOWER MOTOR	3.00	3475	3	208	9.1	145T	K	NONE	208	9.1	5.8	2016	168
741	COMPRESSOR	.75	1725	1	115 230	10.6 5.3	---	KFU3	---	115	10.6	9.2	4028	170
315	#5 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4 3.7	---	P	---	460	3.7	2.7	2000	171
315	#6 EXHAUST FAN	5.00	1745	3	230 460	14.6 7.3	---	SC	88138	460	7.3	5.4	1000	171
315	EXHAUST FAN #2	5.00	1745	3	230 460	14.6 7.3	---	SC	88136	460	7.3	5.4	1000	171
080	RADIAL ARM SAW	3.00	3425	3	220 440	14.7	686	---	NONE	208	14.7	12.0	1000	173
315	EXHAUST FAN #1	5.00	1745	3	230 460	14.6 7.3	---	SC	78365	460	7.3	5.5	1000	175
209	BLOWER MOTOR #3	3.00	3475	3	208	9.1	145T	K	NONE	208	9.1	6.1	2016	177
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.5 6.5	---	---	94093	460	6.5	2.8	2000	178
314	BLOWER MOTOR	5.00	3460	3	200	14.2	---	---	97271	208	14.2	12.9	1000	178
315	SHELL WALKER	.50	1725	3	208	4.0	---	---	---	208	4.0	2.8	2000	178
315	HYD PUMP MOTOR	3.00	3475	3	230 460	13.0 6.5	---	---	94099	460	6.5	2.8	2000	178
209	BLOWER MOTOR	3.00	3475	3	208	9.1	145T	K	NONE	208	9.1	6.2	2016	180
902	AIR COMPRESSOR	5.00	1725	3	200	16.6	184T	A	NONE	208	16.6	17.4	750	180
112	WASHING MACH 087222	5.00	1760	3	208 416	14.8 7.4	2540	GOGK	087223	208	14.8	9.7	750	186
315	#9 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4 3.7	---	P	---	460	3.7	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0 6.5	---	---	94094	460	6.5	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0 6.5	---	---	94091	460	6.5	3.0	2000	191
315	VACUUM UNIT 3 FROM/E	5.00	3500	3	230 460	13.8 6.9	---	---	95148	460	6.9	6.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.5 6.5	---	---	94098	460	6.5	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.5 6.5	---	---	94514	460	6.5	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0 6.5	---	---	94095	460	6.5	3.0	2000	191
053	AIR HANDLER MOTOR	2.00	1735	3	200	6.8	145T	TDR-BE	96368	208	6.6	---	2016	191
315	#10 MAIN/VARI CONLY	2.00	1730	3	230 460	7.4 3.7	---	P	---	460	3.7	3.0	2000	191
315	#6 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4 3.7	---	P	---	460	3.7	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0 6.5	---	---	94090	460	6.5	3.0	2000	191
325	AIR CONDITIONER COMP	---	---	3	208 240	37.3	---	---	89393	208	37.3	27.0	500	194
315	HYDRAULIC PUMP	5.00	1730	3	230 460	14.0 7.0	---	P	---	460	7.0	4.1	1500	196
315	#2 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4 3.7	---	P	---	460	3.7	3.1	2000	197
315	EAST VACUUM UNIT	5.00	3500	3	230 460	13.8 6.9	---	---	95147	460	6.9	6.2	2000	197
315	BANDING CONVEYOR MTR	1.00	1725	3	208	6.0	---	P	NONE	208	6.0	3.1	2000	197

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
904	PAINT BOOTH WTR PUMP	5.00	3500	3	208	13.8	9402	SSHH	60179	208	13.8	5.0	1000	199
722	VACUUM MOTOR	5.00	3600	3	220	15.8			95856	208	15.8	14.1	1000	203
315	UNIT #4 W END CONVEY	5.00	1730	3	230 460	13.5 6.5			NONE	460	6.5	3.2	2000	204
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0 6.5			94515	460	6.5	3.2	2000	204
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.5 6.5			94513	460	6.5	3.2	2000	204
315	W ED VARI-CROSS-OVER	.50	1725	3	208	4.0		P		208	4.0	7.1	2016	206
202	BATT. A. OH EXHS FAN	10.00	1745	3	208	29.9			97273	208	29.9	15.0	1000	208
314	PUMP MOTOR	5.00	1730	3	230 460	14.0 7.0		P		460	7.0	4.4	1500	210
315	UNLOAD HYD PUMP #1	5.00	1730	3	208	13.6			NONE	208	13.6	14.7	1000	211
107	CONDENSOR MOTOR	5.00	1730	3	230 460	8.4 4.2			98378	460	4.2	4.5	1500	215
315	CIRCULATING PUMP	3.00	3450	3	230 460	14.0 7.0				460	7.0	4.5	1500	215
308	HYD PUMP MTR #1	5.00	1730	3	230 460	7.4 3.7		P		460	3.7	3.4	2000	217
315	#1 MAIN DRIVE CONLY	2.00	1730	3	208 220 440	28.8 27.2 13.6	215T	R	NONE	208	28.8	20.0	750	217
112	DRYER BLOWER 085770	10.00	1735	3	230 460	7.4 3.7		P		460	3.7	3.5	2000	223
315	#8 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4 3.7		P		460	3.7	3.5	2000	223
315	#4 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4 3.7		P		460	3.7	3.5	2000	223
112	DRYER BLOWER	10.00	1735	3	208 220 440	28.8 27.2 13.6	215T	R	NONE	208	28.8	20.5	750	225
315	UNLOAD HYD PUMP #2	5.00	1730	3	230 460	14.0 7.0		P		460	7.0	4.7	1500	225
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0 6.5			94088	460	6.5	3.6	2000	229
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0 6.5			94089	460	6.5	3.6	2000	229
315	WIND BOX FAN DRIVE	5.00	1750	3	220 440	13.6 6.8	254	EX	69192	208	14.4	7.5	2016	230
209	WASHING MACH 085824	7.50	1700	3	208 416	21.6 10.8	2560Z	P	085846	208	21.6	21.5	750	232
315	#3 MAIN DRIVE CONLY	2.00	1730	3	230 460	7.4 3.7		P		460	3.7	3.7	2000	236
315	#4 HYD PUMP CONNOLLY	5.00	1730	3	230 460	14.0 7.0		P		460	7.0	5.3	2000	238
080	SANDUST VACUUM	5.00	1740	3	230 460	13.0 6.5			66090	208	16.7	16.7	1000	241
315	HYD PUMP MOTOR	5.00	1745	3	200	29.9			94518	460	6.5	3.8	2000	242
314	PUMP MOTOR	10.00	1745	3	230 460	13.0 6.5			97274	208	29.9	17.6	1000	244
315	HYD PUMP MOTOR	5.00	1740	3	230 460	13.0 6.5			94096	460	6.5	3.8	2000	248
112	WASHER 085746	7.50	1700	3	208 416	21.6 10.8	25642	P	085742	208	21.6	23.0	750	249
701	EAST AIR COMPRESSOR	.50	1725	1	115 230	10.0 5.0		OX	0120860	208	10.0	9.2	6000	254
724	STACK FAN #3	7.50	1750	3	208	20.6		P		115	10.0	9.0	1968	255
315	#6 HYD PUMP CONNOLLY	5.00	1730	3	230 460	14.0 7.0		P	0104800	208	20.6	4.0	2000	255
724	STACK FAN #2	7.50	1750	3	208	20.6		OX		460	7.0	8.9	2016	258
112	AIR HANDLER	10.00	1755	3	230 460	25.2 12.6		K	NONE	460	12.6	18.0	1000	260
703	CONDENSATE PUMP	7.50	1745	3	200 400	23.4 11.7	213T		69358	208	22.5	3.8	5014	260
315	AIR COMPRESSOR	1.00	1740	3	230 460	14.0 7.0		P		460	7.0	4.1	2000	262
315	#5 HYD MTR CONNOLLY	5.00	1730	3	230 460	14.0 7.0		P		460	7.0	8.7	2016	267
315	#9 HYD PUMP CONNOLLY	5.00	1730	3	230 460	12.8 6.4	254	EK	69190	208	13.5	4.2	2000	268
209	FORCED BLOWER #2	5.00	1740	3	230 460	13.0 6.5			94516	460	6.5	3.6	5014	275
315	HYD PUMP MOTOR	1.00	1740	3	220 440	13.8 6.9		K	95142	480	6.9	4.6	2000	283
708	AIR COMPRESSOR MOTOR	1.00	3500	3	230 480	13.8 6.9			089352	208	20.0	20.0	1000	288
315	VACUUM UNIT #3	5.00	3425	3	208 220 440	20.0 10.0	712			208	22.4	10.6	1968	289
080	RADIAL ARM SAW	7.50	1800	3	200	22.4		COSO		208	22.4	4.6	2000	293
724	BURNER MTR #3 BOILER	5.00	1730	3	230 460	14.0 7.0		P		460	7.0	5.1	4028	296
315	#3 HYD PUMP CONNOLLY	5.00	1730	3	208	5.8			93704	208	5.8	5.1	4028	296
741	CONDENSER FAN MOTOR	1.00	1730	3	208	5.8			93704	208	5.8	5.1	4028	296
741	CONDENSER FAN MOTOR	1.00	1730	3	208	5.8			93704	208	5.8	5.1	4028	296
724	BURNER MTR #2 BOILER	7.50	1800	3	230 460	14.0 7.0		COSO		460	7.0	4.7	2000	300
315	#2 HYD PUMP CONNOLLY	5.00	1730	3	200	22.4		P		208	22.4	11.1	1968	303
724	BURNER MTR #1 BOILER	7.50	1800	3	208	22.4	215T	COSO		208	22.4	11.1	1968	303
112	DRYER BLOWER 85768	10.00	1735	3	208 220 440	28.8 27.2 13.6		R	NONE	208	28.8	28.0	750	303

DAY AND ZIMMERMANN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
315	VACUUM UNIT #5	5.00	3500	3	230 460	13.8 6.9	---	K	95145	460	6.9	4.8	2000	307
315	#1 HYD MOTOR ONLY	5.00	1730	3	230 460	14.0 7.0	---	P	---	460	7.0	4.8	2000	307
315	VACUUM UNIT #7	5.00	3500	3	230 460	13.8 6.9	---	K	95150	460	6.9	4.8	2000	307
741	CONDENSER FAN MOTOR	1.00	---	3	208	5.8	---	---	93704	208	5.8	5.3	4028	308
315	#7 HYD PUMP CONROLLY	5.00	1730	3	230 460	14.0 7.0	---	P	---	460	7.0	4.9	2000	312
315	#10 HYD PUMP MOTOR	5.00	1730	3	230 460	14.0 7.0	---	P	---	460	7.0	5.0	2000	319
315	UNIT #3 W END CONVEY	5.00	1730	3	230 460	13.8 6.5	---	L	NONE	460	6.5	5.0	2000	319
724	LATHE-CHUCK	7.50	1725	3	220 440	20.1 10.0	---	K	95643	208	20.1	11.0	1500	320
315	STACK FAN #1	7.50	1725	3	220 440	20.1 10.3	---	---	60590	208	20.6	11.0	1968	331
717	AIR COMPRESSOR	5.00	1725	3	230 460	14.5 7.3	---	L	97815	208	14.5	11.5	2016	334
744	WATER PUMP MOTOR	15.00	3500	3	230 460	38.0 19.0	---	---	---	460	19.0	12.4	2016	360
315	HYD PUM CON SWAGE #1	15.00	1765	3	230 460	40.0 20.0	---	---	---	460	20.0	11.8	1000	376
315	VACUUM UNIT (WEST)	5.00	3500	3	230 460	13.8 6.9	---	K	95143	460	6.9	6.0	2000	383
186	FEED PUMP MOTOR	5.00	1750	3	220 440	13.6 6.8	254	MLU	NONE	208	14.4	12.5	2016	385
324	VACUUM UNIT HRD TEST	5.00	3500	3	230 460	13.8 6.9	---	K	95149	460	6.9	6.1	2000	388
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230 460	40.0 20.0	---	---	---	460	20.0	11.6	1000	389
107	DUCT BLOWER MOTOR	5.00	---	3	208	16.2	184T	K	NONE	208	16.2	14.0	2000	404
107	COOL DISCHRG BLOWER	5.00	1735	3	200	16.3	R184T	COG4B	NONE	208	15.7	14.0	2016	407
209	ELEVATOR	5.00	1730	3	208	14.7	254	K	12150	208	14.7	14.5	2016	421
186	BURNER MOTOR	7.50	1750	3	208 220	21.2 20.0	284	MLU	NONE	208	21.2	1.7	1500	433
741	AIR HANDLER	3.00	1735	3	200	9.7	---	TDR-BE	---	208	9.7	8.0	4028	447
716	AC COND. FAN NORTH	7.50	---	3	440	10.5	---	---	---	440	10.5	7.7	1000	473
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230 460	40.0 20.0	---	---	---	460	20.0	14.9	1000	475
724	AIR COMPRESSOR MOTOR	5.00	1725	3	230	16.6	---	A	---	200	16.6	17.6	1968	480
739	AIR COMPRESSOR	2.00	1725	3	200 400	7.1 3.6	---	---	---	208	7.1	6.7	5014	485
716	AC COND SOUTH UNIT	7.50	---	3	440	10.5	---	---	---	440	10.5	8.2	2016	504
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230 460	40.0 20.0	---	---	---	460	20.0	16.0	1000	509
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230 460	40.0 20.0	---	---	---	460	20.0	16.9	1000	539
705	AC CONDENSER MOTOR	---	---	3	460	4.6	---	---	---	460	4.6	3.4	5014	544
315	HYD PUMP MOTOR	10.00	1750	3	230 460	26.0 13.0	---	RGZZ	93127	460	13.0	8.6	2000	547
722	AIR COMPRESSOR	5.00	1725	3	230 460	14.5 7.3	---	L	97821	208	14.5	8.7	2016	559
315	HYD PUMP MOTOR	10.00	1755	3	230 460	27.0 13.5	---	P	95099	460	13.5	9.0	2000	573
315	HYD PUMP MOTOR	10.00	1755	3	230 460	27.0 13.5	---	P	96100	460	13.5	9.0	2000	575
315	HYD PUMP MOTOR	10.00	1755	3	230 460	27.0 13.5	---	P	96101	460	13.5	9.1	2000	580
315	HYD PUMP MOTOR	10.00	1755	3	230 460	27.0 13.5	---	P	96102	460	13.5	9.2	2000	587
315	HYD PUMP MOTOR	10.00	1755	3	230 460	27.0 13.5	---	P	96103	460	13.5	9.2	2000	587
315	HYD PUMP/PEL PRES #1	15.00	1765	3	230 460	40.0 20.0	---	P	---	460	20.0	19.0	1000	606
902	WATER FEED PUMP	15.00	3515	3	208	42.7	254T	---	---	208	42.7	43.5	1000	627
736	AIR COMPRESSOR MOTOR	1.00	1740	3	220 440	3.8 1.9	---	---	69351	208	3.8	4.2	5014	670
112	BOILER BLOWER	7.50	1750	3	220 440	19.6 9.8	284	OGX	80251	208	20.8	17.0	3000	734
705	AIR COMPRESSOR	5.00	1725	3	230 460	14.5 7.3	---	L	97820	208	14.5	13.8	4028	795
717	CONDENSER FAN	7.50	1755	3	460	10.5	---	---	---	460	10.5	13.0	2016	835
705	AIR HANDLER MOTOR	3.00	1725	3	230 460	13.2 6.6	---	---	93116	460	6.6	5.7	5014	911
315	HYD PUMP MOTOR	15.00	1765	3	230 460	40.0 20.0	---	---	94685	460	20.0	15.0	2000	956
732	AC COMPRESSOR MOTOR	---	---	3	200 240	18.2	---	---	---	208	18.2	14.4	5014	1041
724	WATERFEED PUMP #1	15.00	3515	1	200	42.7	B	---	---	208	42.7	43.8	1968	1195
724	WATERFEED PUMP #3	15.00	3515	3	200	42.7	B	---	---	208	42.7	46.2	1968	1259
724	WATERFEED PUMP #2	15.00	3515	3	200	42.7	B	---	---	208	42.7	46.4	1968	1266
904	AIR COMPRESSOR	25.00	1160	3	220 440	61.2 30.6	405	CS	02499	440	30.6	31.0	1500	1399
315	HYD PUMP	10.00	1175	3	230 460	26.6 13.3	---	---	---	208	26.6	26.0	2000	1658
744	COMPRESSOR MOTOR	100.0	1770	3	230 460	240. 120.	---	---	---	460	120.0	124.0	492	1945
107	REFRIG COMPRESSOR	---	---	3	200 230 460	126. 144. 57.0	---	---	NONE	208	121.0	75.0	1000	2390

DAY AND ZIMMERMANN, CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
315	RELINCE MOTOR	125.0	885	3	230 460	310. 155.	---	P	98376	460	155.0	172.0	1500	4112
717	A.C. COMPRESSOR	---	---	3	460	132.	---	---	---	460	132.0	70.6	2016	4536
744	SCHRAMM COMPRESS #3	100.0	1770	3	230 460	240. 120.	---	---	---	460	120.0	147.7	1000	4708
741	COMPRESSOR MOTOR	---	---	3	208	106.	---	---	---	208	106.0	82.6	4028	4794
716	AC COMP SOUTH UNIT	---	---	3	440	132.	---	---	---	440	132.0	80.9	2016	4971
744	SCHRAMM COMPRESS #1	100.0	1770	3	230 460	240. 120.	---	---	---	460	120.0	157.5	1000	5019
744	SCHRAMM COMPRESS #4	100.0	1770	3	230 460	240. 120.	---	---	---	460	120.0	165.4	1000	5270
716	AC COND FAN NORTH	---	---	3	440	132.	---	---	---	440	132.0	93.0	2016	5716
744	COMPRESSOR MOTOR	200.0	1180	3	460	238.	---	K	88424	460	238.0	203.0	984	6237
744	GARD DENVER COMPRESS	200.0	1180	3	460	238.	---	K	---	460	238.0	198.0	1000	6310
705	AC COMPRESSOR	---	---	3	460	50.0	---	---	---	460	50.0	43.0	5014	6871
328	BLOCAIR COMPRESSOR	150.0	885	3	230 460	384. 192.	---	---	93127	460	192.0	180.0	1500	8605
207	LEONARD AIR COND	---	---	---	---	---	---	---	98375	460	192.0	9.0	100	---
058	BLOWER MOTOR	.33	1725	3	220	1.1	45A	K	79478	208	1.2	---	300	---
102	EXHAUST FAN	.75	1750	1	115 230	10.4 5.2	C66	---	70974	115	10.4	---	100	---
058	CONDENSER FAN MOTOR	.50	1075	1	115 230	5.8 2.9	K56	CC	NONE	115	5.8	---	750	---
203	ENGINE LATHE	.50	1725	3	208 220 440	1.6 0.8	J56	PA	96553	208	1.6	---	1200	---
058	BLOWER MOTOR	.33	1740	3	220	1.1	45A	K	79476	208	1.2	---	300	---
207	WATER COOLER	---	---	1	115	---	---	---	60815	115	---	0.3	100	---
058	BLOWER MOTOR	1.00	1740	3	220 440	3.8 1.9	---	---	61876	208	4.0	---	300	---
203	PIPE THREADER	---	---	---	---	---	---	---	091222	---	---	3.8	100	---
315	HYD PUMP MOTOR #2	5.00	1725	3	230 460	13.0 6.5	---	---	---	460	6.5	---	2000	---
951	FILM PROCESSOR #2	---	---	---	---	---	---	---	NONE	---	---	10.6	200	---
221	AIR CONDITIONER EAST	---	---	---	---	---	---	---	NONE	---	---	9.9	200	---
202	ARMATURE LATHE	---	---	---	---	---	---	---	79027	---	---	4.1	50	---
904	PAINT 800TH EXHAUST	---	---	---	---	---	---	---	---	---	---	4.7	1000	---
203	ENGINE LATHE	1.00	1200	3	208 220 440	3.5 1.8	184C	HV	96553	208	3.5	---	1200	---
208	AIR CONDITIONER	---	---	---	---	---	---	---	0364	---	---	7.1	200	---
203	HYDRAULIC MOTOR	2.00	1800	3	---	---	145T	---	93114	---	---	6.3	100	---
203	JIG BORE TABLE MOTOR	1.00	1600	3	220 440	4.0 2.0	612	PTB	91741	208	4.2	---	1000	---
905	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	7.9	100	---
907	SUMP PUMP IN MANHOLE	---	---	---	---	---	---	---	---	---	---	8.2	100	---
203	JIG BORE SPINDLE MTR	1.00	1725	3	220 440	3.9 1.9	612	PT	91741	208	4.1	---	1000	---
203	LUCAS MILL	---	---	---	---	---	---	---	089370	---	---	6.9	1000	---
913	DEHUMIDIFIER	---	---	---	---	---	---	---	96181	---	---	9.0	1200	---
243	COMPRESS MOTOR EAST	---	---	3	208 220	---	---	---	89394	208	---	---	---	---
243	COMPRESS MOTOR WEST	---	---	3	208 220	---	---	---	89394	208	---	---	---	---
915	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	6.9	100	---
058	BLOWER MOTOR	.50	1750	---	---	---	A	E12	02389	---	---	4.1	300	---
904	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	7.5	100	---
058	BLOWER MOTOR	.33	1725	3	220	1.1	45A	K	79481	208	1.2	---	300	---
202	VALVE REFACER MOTOR	---	---	---	---	---	---	---	93734	---	---	6.6	50	---
951	COOLING UNIT FAN	---	---	---	---	---	---	---	76143	---	---	1.8	200	---
202	VALVE REFACER MOTOR	---	---	---	---	---	---	---	93734	---	---	1.5	50	---
221	AIR CONDITIONER WEST	---	---	---	---	---	---	---	NONE	---	---	9.6	200	---
203	ENGINE LATHE	25.00	1760	3	220 440	62.6 31.3	364Y	K	96553	208	66.2	---	1200	---
712	SHAKER MOTOR	.50	1735	3	208 220	1.2 .4	---	---	71022	208	.4	---	500	---
909	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	7.1	100	---
102	EXHAUST FAN	.75	1750	1	115 230	10.4 5.2	C66	---	70927	115	10.4	---	100	---
060	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	8.7	100	---
816	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	8.3	100	---
203	FAN MOTOR	1.00	3450	3	---	---	48	---	93114	---	---	2.7	100	---

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
809	CONDENSATE PUMP	---	---	3	208 416	---	---	---	41105	---	---	---	100	---
809	CHEM FEED PUMP MOTOR	---	---	---	---	---	---	---	64558	---	---	3.4	2016	---
812	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	8.3	100	---
057	PUMP MOTOR	---	---	---	---	---	---	---	98594	---	---	2.2	100	---
913	DEHUMIDIFIER	---	---	---	---	---	---	---	96182	---	---	8.8	1200	---
913	SUMP PUMP EAST DOCK	---	---	---	---	---	---	---	---	---	---	7.1	100	---
207	AIR CONDITIONER	---	---	---	---	---	---	---	---	---	---	---	200	---
201	HEATER OIL MOTOR	---	---	---	---	---	---	---	62347	---	---	---	1500	---
202	AIR CONDITIONER	---	---	---	---	---	---	---	93768	---	---	8.8	100	---
202	CONDENSATE PUMP	---	---	---	---	---	---	---	---	---	---	2.1	100	---
058	BLOWER MOTOR	.33	1725	1	230	3.3	58562	FHT	NONE	230	3.3	---	300	---
902	STACK FAN MOTOR #3	5.00	1750	3	208	14.4	254	OS	02262	208	14.4	7.7	1000	---
920	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	19.0	100	---
910	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	8.6	100	---
203	PRESSURE PUMP TEST	.33	1725	1	115	6.3	48	---	NONE	115	6.3	---	100	---
203	HYDRAULIC PUMP MOTOR	---	---	---	---	---	---	---	---	---	---	63.0	100	---
203	HOIST MOTOR	---	---	---	---	---	---	---	---	---	---	4.5	100	---
208	AIR CONDITIONER	---	---	---	---	---	---	---	0368	---	---	1.0	200	---
208	AIR CONDITIONER	---	---	---	---	---	---	---	0367	---	---	1.4	200	---
208	AIR CONDITIONER	---	---	---	---	---	---	---	0365	---	---	8.0	200	---
208	AIR CONDITIONER	---	---	---	---	---	---	---	0366	---	---	1.9	200	---
052	BOILER OIL PUMP	.33	1725	1	115 208 230	6.0 3.0	56C	---	---	115	6.0	---	1500	---
208	AIR CONDITIONER	---	---	---	---	---	---	---	0369	---	---	5.2	200	---
913	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	8.5	100	---
744	ELECTRA COMPRESSOR	400.0	1775	3	440	460.	---	K	97961	440	460.0	397.0	2016	24397

APPENDIX F

ACTIVE MOTORS SORTED BY INCREASING ANNUAL ELECTRICITY COST
BUILDING NUMBERS ABOVE 1000

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1122	SUMP PUMP	.33	1725	1	115	10.0	---	---	---	115	10.0	5.6	100	3
1109	SUMP PUMP	.33	1720	1	115	8.0	---	---	NONE	115	8.0	6.5	100	3
1109	SUMP PUMP	.33	1725	1	115	8.0	---	---	NONE	115	8.0	6.5	100	3
1111	SUMP PUMP ELEVAT PIT	.33	---	1	115	10.0	---	---	---	115	10.0	6.3	100	3
3016	SUMP PUMP	.33	---	1	110	---	---	---	NONE	115	---	7.5	100	3
3015	SUMP PUMP	.33	---	1	115	---	---	---	NONE	115	---	8.6	100	4
2106	SUMP PUMP	.33	1725	1	115	10.0	---	---	NONE	115	10.0	8.3	100	4
1107	SUMP PUMP	.33	1725	1	115	8.0	---	---	NONE	115	8.0	8.2	100	4
2202-3	SUMP PUMP	.33	1725	1	115	10.0	---	---	NONE	115	10.0	8.2	100	4
3015	SUB SUMP PUMP OUT SO	.33	---	1	115	---	---	---	NONE	115	---	8.8	100	4
2202-1	SUMP PUMP	.33	1725	1	115	10.0	---	---	NONE	115	10.0	8.2	100	4
3015	SUB SUMP PUMP OUT NO	.33	---	1	115	---	---	---	NONE	115	---	8.6	100	4
3012	SUB SUMP PUMP	.33	---	1	115	8.0	---	---	NONE	115	8.0	8.6	100	4
1111	SUMP PUMP N.E CORNER	.33	---	1	115	10.0	---	---	---	115	10.0	8.1	100	4
2202-2	SUMP PUMP	.33	1725	1	115	10.0	---	---	NONE	115	10.0	7.9	100	4
3016	SUMP PUMP	.33	---	1	110	---	---	---	NONE	115	---	8.3	100	4
1107	CONDENSATE MOTOR	.50	1735	3	208	1.7	A-68	---	78913	208	1.7	1.9	200	5
1407	DELUGE COMPRESSOR SO	.50	1725	1	115	4.2	48	---	96239	115	8.4	3.4	360	6
1418	DELUGE COMPRESSOR SO	.50	1725	1	115	230	48	---	96224	115	8.4	4.4	360	7
1402	DELUGE COMPRESSOR SO	.50	1725	1	115	230	48	---	96238	115	8.4	5.0	360	8
1409	DELUGE COMPRESSOR SO	.50	1725	1	115	230	48	---	96222	115	8.4	5.1	360	8
1404	DELUGE COMPRESSOR	.50	1725	1	115	230	48	---	NONE	115	8.4	4.7	360	8
1408	DELUGE COMPRESSOR NO	.50	1725	1	115	230	48	---	96223	115	8.4	4.9	360	8
1416	DELUGE COMPRESSOR SO	.50	1725	1	115	230	48	---	96220	115	8.4	5.4	360	9
1417	DELUGE COMPRESSOR NO	.50	1725	1	115	230	48	---	96235	115	8.4	5.5	360	9
2203	EXHST BLOWER ON ROOF	.33	1750	3	208	2.0	---	---	69278	208	2.0	1.2	500	9
1415	DELUGE COMPRESSOR NO	.50	1725	1	115	230	48	---	96242	115	8.4	5.7	360	9
1410	DELUGE COMPRESSOR NO	.50	1725	1	115	230	48	---	96237	115	8.4	5.7	360	9
1420	DELUGE COMPRESSOR SO	.50	1725	1	115	230	48	---	96227	115	8.4	5.5	360	9
1403	DELUGE COMPRESSOR NO	.50	1725	1	115	230	48	---	06236	115	8.4	5.4	360	9
2203	EXHAUST BLOWER	.33	1750	3	208	2.0	WF	---	NONE	208	2.0	1.4	500	10
1419	DELUGE COMPRESSOR NO	.50	1725	1	115	230	48	---	96226	115	8.4	6.3	360	10
1406	DELUGE COMPRESSOR SO	.50	1725	1	115	230	48	---	96233	115	8.4	5.8	360	10
1411	DELUGE COMPRESSOR SO	.50	1725	1	115	230	48	---	96229	115	8.4	6.1	360	10
1412	DELUGE COMPRESSOR SO	.50	1725	1	115	230	48	---	96221	115	8.4	5.9	360	10
2106	AUXILIARY PUMP MOTOR	2.00	1740	3	220	440	3.0	---	41067	440	3.0	2.7	150	12
1407	DELUGE COMPRESSOR NO	.33	1725	1	115	---	48	---	96239	115	6.6	8.1	360	13
1415	DELUGE COMPRESSOR SO	.75	1725	1	115	230	56	---	96242	115	12.0	8.2	360	14
1408	PUMP MOTOR (TANK)	.50	1725	1	115	230	56	---	PM0724	115	7.8	6.3	500	14
1408	DELUGE COMPRESSOR SO	.33	1725	1	115	---	48	---	96223	115	6.6	8.7	360	14
1413	DELUGE COMPRESSOR NO	.75	1725	1	115	230	56	---	96240	115	12.0	9.0	360	15
2203	AGITATOR MOTOR	.75	1750	3	230	460	143T	---	NONE	208	2.9	2.2	500	16
2001	FURNACE BLOWER	.50	1725	1	115	230	---	---	NONE	115	7.4	3.6	1000	17
1417	DELUGE COMPRESSOR SO	.50	1725	1	115	230	48	---	96235	115	8.4	10.1	360	17
2106	EXHAUST FAN	.50	1725	1	115	---	48	---	78181	115	7.8	7.5	500	17
1411	DELUGE COMPRESSOR NO	.33	1725	1	115	---	48	---	96229	115	6.6	11.0	360	18
1419	DELUGE COMPRESSOR SO	.33	1725	1	115	---	48	---	96226	115	6.6	10.7	360	18
1405	DELUGE COMPRESSOR SO	.33	1725	1	115	---	48	---	96235	115	6.6	11.0	360	18
1418	DELUGE COMPRESSOR NO	.33	1725	1	115	---	48	---	96224	115	6.6	11.0	360	18
1414	DELUGE COMPRESSOR NO	.33	1725	1	115	---	48	---	96230	115	6.6	11.1	360	18
1412	DELUGE COMPRESSOR NO	.33	1725	1	115	---	48	---	96228	115	6.6	11.1	360	18
2106	HEATER FAN MOTOR	---	1725	1	115	2.9	---	---	96451	115	2.9	2.6	1500	18

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1402	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96238	115	6.6	10.7	360	18
1410	DELUGE COMPRESSOR SO	.33	1725	1	115	6.6	48	---	96237	115	6.6	11.3	360	19
1409	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96222	115	6.6	11.3	360	19
1413	DELUGE COMPRESSOR SO	.33	1725	1	115	6.6	48	---	96231	115	6.6	11.3	360	19
1416	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96220	115	6.6	11.4	360	19
1406	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96233	115	6.6	11.6	360	19
2202-3	ROOF TOP EXHST BLOW	1.00	3450	3	208	2.8	1218	---	68076	208	2.8	2.6	500	19
1403	DELUGE COMPRESSOR SO	.33	1725	1	115	6.6	48	---	96236	115	6.6	11.4	360	19
1420	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96227	115	6.6	11.5	360	19
2202-2	COMMUNOTOR MOTOR	.50	1725	3	208	2.6	P56	P	94084	208	2.6	2.0	750	21
1405	DELUGE COMPRESSOR NO	.33	1725	1	115	6.6	48	---	96234	115	6.6	12.7	360	21
2202-1	COMMUNOTOR MOTOR	.50	1725	3	208	2.6	P56	P	94083	208	2.6	2.0	750	21
2202-3	COMMUNOTOR MOTOR	.75	1140	3	208	3.2	P56	P	94085	208	3.2	2.1	750	23
2106	CST SLOW MIXER	.75	1725	3	208	220 440	3.0 1.5	---	093508	208	3.2	1.6	1000	23
2106	MIXER	.33	1725	1	115	---	6.2	---	---	115	6.2	6.1	1000	28
1414	DELUGE COMPRESSOR SO	.75	1725	1	115	230	12.0	---	96241	115	12.0	17.4	360	29
1105	OIL PUMP MOTOR #1	.50	1725	3	208	440	1.8	---	---	208	1.8	1.3	2016	38
2203	BOILER FAN EXHAUST	.50	1725	3	208	220 440	1.7 .8	---	74156	208	1.7	1.0	500	47
2002	AIR COMPRESSOR	1.50	1725	1	115	230	17.0 8.5	---	93818	115	17.0	7.5	1500	52
1008	PUMP MOTOR	3.00	3505	3	208	---	10.1	---	PM0771	208	10.1	7.5	500	54
2203	SLUDGE PUMP	2.00	1140	3	208	---	7.8	---	NONE	208	7.8	7.5	500	54
1109	NO. PRE-HEAT CONVEY	1.00	1755	3	208	---	4.0	---	NONE	208	4.0	3.9	1000	55
1109	SO. PRE-HEAT CONVEY	1.00	1755	3	208	---	4.0	---	NONE	208	4.0	3.9	1000	55
1105	OIL PUMP MOTOR #2	.50	1725	3	208	440	2.0 1.0	---	NONE	208	2.0	2.0	2016	59
1109	#4 POUR CONV DRIVE	.75	1725	3	208	---	5.3	---	87316	208	5.3	4.3	1000	62
1139	AIR HANDLER DRIVE	1.50	1730	3	220	440	5.0 2.5	---	NONE	208	5.0	4.5	1000	64
1109	#1 POUR CONV DRIVE	1.00	1725	3	208	---	6.0	---	88003	208	6.0	4.6	1000	66
1109	VACUUM UNIT	5.00	3500	3	208	---	15.8	---	95860	208	15.8	15.9	300	69
1109	NO. PRE-HEAT BLOWER	1.00	1745	3	208	---	4.3	---	NONE	208	4.3	5.1	1000	73
2106	CST SLOW MIX MOTOR	.75	1800	3	208	220 440	3.2 3.0 1.5	---	93507	440	1.5	1.6	1500	73
1109	CONVEYOR DRIVE MOTOR	1.00	1725	3	208	---	6.0	---	NONE	208	6.0	5.4	1000	78
1109	SO. PRE-HEAT BLOWER	1.00	1745	3	208	---	4.3	---	NONE	208	4.3	5.5	1000	80
2106	BURNER MOTOR	.33	1725	1	115	208 230	6.0 3.0	---	NONE	115	6.0	8.9	2016	83
2203	PUMP MOTOR	5.00	870	3	208	---	17.5	---	NONE	208	17.5	14.6	500	106
1107	AIR HANDLER DRIVE	1.00	1720	3	208	220	4.6 3.4	---	41290	208	4.6	3.7	2016	107
2202-2	PUMP MOTOR #2	7.50	1750	3	208	220 440	21.2 20.0 10.0	---	NONE	208	21.2	16.0	500	116
1008	PIT PUMP #1	7.50	3450	3	208	---	23.0	---	PM0726	208	23.0	16.7	500	120
1008	PIT PUMP #2	7.50	3450	3	208	---	23.0	---	PM0725	208	23.0	19.8	500	142
1105	TRANSFER PUMP MOTOR	2.00	3460	3	208	---	6.9	---	COG48	208	6.9	5.5	2016	154
2106	RAPID MIX	3.00	---	3	230	460	10.0 5.0	---	NONE	460	5.0	3.6	1500	171
2202-2	SEWAGE PUMP MOTOR	10.00	1740	3	208	220 440	30.8 29.0 14.8	---	NONE	208	30.8	29.0	500	210
2202-3	PUMP MOTOR #1	15.00	1750	3	208	220 440	42.0 40.0 20.0	---	NONE	208	42.0	36.0	500	260
2202-3	CENTER PUMP MOTOR #2	15.00	1740	3	220	440	41.0 20.5	---	43252	208	41.0	37.0	500	267
2202-1	PUMP MOTOR #1	7.50	1750	3	208	220 440	21.2 20.0 10.0	---	96157	208	21.2	20.0	1000	288
2202-1	PUMP MOTOR #2	7.50	1750	3	208	220 440	21.2 20.0 10.0	---	96156	208	21.2	20.0	1000	288
2202-3	PUMP MOTOR #3	25.00	1180	3	208	220 440	78.0 74.0 37.0	---	NONE	208	78.0	72.0	500	520
1105	WATER FEED PUMP #2	7.50	1745	3	200	400	23.4 11.7	---	---	208	23.4	22.0	2016	610
1105	WATER FEED PUMP #1	7.50	1745	3	200	400	23.4 11.7	---	---	208	23.4	22.0	2016	615
1105	BURNER MOTOR #1	10.00	3465	3	200	---	27.5	---	TFS BD2	208	27.5	25.3	2016	707
1105	BURNER MOTOR #2	10.00	3465	3	200	---	27.5	---	TFS BD2	208	27.5	27.0	2016	753
2106-A	LOW LIFT PUMP MOTOR	20.00	1755	3	230	460	52.0 26.0	---	NONE	460	26.0	21.0	1500	1005
2106-A	RIVER WATER PUMP	20.00	1755	3	230	460	52.0 26.0	---	90161	460	26.0	21.0	1500	1005

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
2106	WASH PUMP MOTOR	50.00	1170	3	220 440	126. 63.0	504	KF	41063	440	63.0	45.0	1500	2058
2106	WASH PUMP MOTOR	50.00	1170	3	220 440	126. 63.0	504	KF	41064	440	63.0	55.0	1500	2515
2106	#2 PUMP MOTOR	75.00	1775	3	230 460	190. 95.0	365T	COG46	0429	460	95.0	75.0	1500	3585
2106	#1 PUMP MOTOR	75.00	1775	3	230 460	190. 95.0	365T	COG46	0428	460	95.0	80.6	1500	3854
1003	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	7.8	100	---
1019	SUMP PUMP IN X-RAY	---	---	---	---	---	---	---	---	---	---	9.8	100	---
1017	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	6.8	100	---
2105-A	PUMP MOTOR	75.00	1800	3	220 440	180. 90.0	505-4	SC	40988	208	180.0	---	500	---
2105-A	PUMP MOTOR	2.00	1740	3	220 440	5.6 2.8	---	---	40989	208	5.6	---	500	---
1102	SUMP PUMP MOTOR	.33	---	1	115	---	---	---	NONE	---	---	8.4	100	---
1205	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	5.1	100	---
1140	DEHUMIDIFIER	---	---	---	---	---	---	---	93820	---	---	9.9	1500	---
2106	TANK STIR	---	---	---	---	---	---	---	96066	---	---	2.4	1000	---
2203	GEAR REDUCING PUMP	.50	1775	3	230 460	3.0 1.5	143T	---	40996	---	---	9.2	500	---
1019	SUMP PUMP-MEN'S ROOM	---	---	---	---	---	---	---	---	---	---	15.8	1200	---
1019	DEHUMIDIFIER	---	---	---	---	---	---	---	---	---	---	6.7	1200	---
1065	DEHUMIDIFIER	---	---	---	---	---	---	---	---	---	---	8.6	100	---
1202	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	3.4	1000	---
1109	#1 DIS COOL TUN CONV	.75	1725	3	---	5.3	L56C	P	NONE	---	---	8.4	100	---
3005	SUBMER SUMP PUMP NW	.33	---	1	110	9.0	---	---	NONE	---	---	8.6	100	---
3005	SUBMER SUMP PUMP SE	.33	---	1	110	9.0	---	---	NONE	---	---	8.6	100	---
1005	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	4.2	100	---
1006	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	8.0	100	---
1011	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	8.1	100	---
1127	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	8.3	100	---
1011	SUMP PUMP	.50	---	1	---	---	---	---	---	---	---	11.1	200	---
3017	WATER SUMP PUMP MTR	3.00	3600	3	460	4.0	184P	JU	NONE	---	---	---	100	---
3017	WATER SUMP PUMP MTR	3.00	3600	3	460	4.0	184P	JU	NONE	---	---	---	100	---

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